The New Dad Study (NEST)

a mixed methods feasibility study to improve first-time fathers' transition to fatherhood, their mental health and wellbeing

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THE NEW DAD STUDY

A mixed methods feasibility study to improve first-time fathers' transition to fatherhood, their mental health and wellbeing

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ABSTRACT

Background: Men's mental health and wellbeing during their transition to fatherhood is an important public health issue, that remains under-researched, especially from a qualitative perspective. Available evidence suggests that rates of mental health problems in new fathers and their impact on the family are significant, but not adequately addressed by UK policies for maternal and child health services. Many health visiting services in England use the Promotional Guide system with mothers and fathers, an intervention to support their transition to parenthood, but there is little known about its use and effectiveness, especially with fathers.

Aims: The primary aim of this study was to explore first-time fathers' needs and experiences during their transition to fatherhood, particularly focusing on their mental health and wellbeing. The secondary aim was to test the feasibility of health visitors' use of the Promotional Guide system with first-time fathers and whether new fathers found this to be an acceptable intervention which met their needs.

Methods: This thesis was designed around the Medical Research Council (MRC) framework for the developing and evaluating complex interventions and incorporates three separate study phases: 1) a qualitative systematic review; 2) an exploratory qualitative study; and 3) a feasibility study with a nested process evaluation, using a mixed-methods approach.

Results: *Phase I Qualitative systematic review:* Twenty-two studies were included, from eight different countries, published between 1990 and 2017. The total number of first-time fathers included in the studies was 351. One hundred and forty-two extracted findings were aggregated into 23 categories and seven synthesized findings: 1) New fatherhood identity, 2) Competing challenges of new fatherhood, 3) Negative feelings and fears, 4) Stress and coping, 5) Lack of support, 6) What new fathers want, and 7) Positive aspects of fatherhood. Gaps identified in this review with respect to the type of support that fathers wanted, how it is provided, by whom, the optimal time for providing this; and whether

new fathers would welcome routine mental health enquiry or screening by health professionals, informed the focus of the qualitative study in *phase II.*

Phase II Qualitative exploratory study: Nine major categories were identified from 21 qualitative interviews with first-time fathers: 1) Preparation for fatherhood, 2) Rollercoaster of feelings, 3) New identity, 4) Challenges and impact, 5) Changed relationship: we're in a different place, 6) Coping and support, 7) Health professionals and services: experience, provision and support, 8) Barriers to accessing support, and 9) Men's perceived needs: what fathers want. A new finding of this study related to men's own perceived needs and how they wanted to be supported during the perinatal period, contributing to the current evidence.

Phase III Feasibility study with a nested process evaluation: Six major categories were identified from 45 questionnaires and ten interviews with a purposive sample of first-time fathers. They were: 1) Fathers' experience of health visitor contact, 2) Fathers' experience of Promotional Guides, 3) Fathers' experience of health services in the perinatal period, 4) Fathers' experience of fatherhood, 5) Fathers' mental health and wellbeing, and 6) Fathers' experience of the research process. The main themes identified from data collected from interviews with 11 health visitors and observations of eight health visitors using Promotional Guides were: 1) Enquiry into fathers' mental health, 2) Promotional Guides in practice, 3) Health visitors' perception of the Promotional Guides system, 4) Barriers to using Promotional Guides with fathers, and 5) Facilitators and recommendations for using Promotional Guides with fathers. While antenatal and postnatal outcomes were collected from 45 first-time fathers, none had received the intervention in its entirety. There is also some uncertainty that the fathers who did report receiving the intervention partially, actually did so. This study identified major gaps in the implementation of the Promotional Guide system.

Conclusion: This study highlighted first-time fathers' mental health and wellbeing needs during their transition to fatherhood, and how they wanted to be supported. It also identified barriers to implementation of the Promotional Guide system by health visitors, which need to be addressed prior to any future

research into this intervention. These findings have a number of implications for researchers, health professionals, health service managers, commissioners, policy makers and parents.

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Baldwin, S. & Kelly, P. (2017) Supporting infants and families. *Independent Nurse*, Feb, p. 39.

LIST OF CONFERENCE PRESENTATIONS DURING THE PHD

Oral Presentations

Title of presentation: Working with fathers; learning from the New Dad Study
Where Held: Institute of Health Visiting Perinatal and Infant Mental Health: Relationships Matter! Conference, London
Date: 10th September 2019

Title of presentation: New Dad Study (NEST): Sharing findings from a qualitative study **Where Held**: IHV Perinatal & Infant Mental Health Forum, London
Date: 30th June 2019

Title of presentation: First-time fathers' experiences, mental health and wellbeing needs during their transition to fatherhood
Where Held: Talking Dads Conference, Blackpool
Date: 17th June 2019

Title of presentation: NEST: Systematic Review findings, relevance to health visiting
Where Held: IHV Perinatal & Infant Mental Health Forum, London
Date: 26th February 2019

Title of presentation: The New Dad Study (NEST) - exploring new fathers mental health and wellbeing
Where Held: "Collaborations for Great Beginnings: Developing Early Years Research", NIHR, CRN and iHV Conference, London
Date: 19th January 2018

Title of presentation: Integrating fathers into health visitor practice to support paternal mental health
Where Held: Mastering evidence-based practice in health visiting, IHV, Conference Aston, Birmingham
Date: 7th March 2017

Title of presentation: Leading for successful outcomes in health visiting today – Leadership in Health Visiting
Where Held: IHV Conference, Brunei Gallery at SOAS, London
Date: 7th December 2016

Poster Presentations

Title of poster: A qualitative exploratory study of UK first-time fathers' experiences, mental health and wellbeing needs during their transition to fatherhood
Where Held: CPHVA/ Unite Annual Professional Conference, Harrogate.
Date: 16th & 17th October 2019

Title of poster: A qualitative exploratory study of UK first-time fathers' experiences, mental health and wellbeing needs during their transition to fatherhood
Where Held: NIHR CLAHRC Continuity of care and managing complexity during and after pregnancy: what we have learnt, London
Date: 12th July 2019

Title of poster: First-time fathers' mental health & wellbeing: A Qualitative Systematic Review
Where Held: HEE/ NIHR ICA Conference Becoming a Clinical Academic Leader, London
Date: 7th February 2019

Title of poster: First-time fathers' mental health & wellbeing: A Qualitative Systematic Review *(Winner of poster competition)*
Where Held: CPHVA/ Unite Annual Professional Conference, Bournemouth
Date: 17th & 18th October 2018

GLOSSARY OF TERMS AND ABBREVIATIONS

Antenatal (AN): the period from conception until the birth of the baby.

Anxiety: a feeling of unease, worry or fear that can be mild or severe.

Anxiety Disorder: includes panic disorder, generalised anxiety disorder (GAD), obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD), can occur on their own or can co-exist with depression.

Depression: Persistent and pervasive low mood of varying severity and duration.

First-time father: a man becoming a parent for the first time (biological or non-biological).

Health visitor (HV): specialist community public health nurse who typically work with families with children under the age of five years.

Mental health: includes well-being and effective functioning of an individual, and effective functioning for a community.

Mental health problem: any psychological difficulty or distress including anxiety, depression and stress.

Mental wellbeing: includes positive mental health, covering both the hedonic (feeling good) and eudemonic components (functioning well) of psychological wellbeing.

Postnatal period (PN): the first year following the birth of the baby.

Perinatal period: the period from conception to one year after birth.

Resident father: a man residing with his expectant partner, or his partner and baby during the transition to fatherhood.

Stress: a state of mental or emotional strain resulting from adverse or demanding circumstances**.**

Transition to fatherhood: the period from conception to one year after birth.

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CHAPTER 1: INTRODUCTION TO THESIS

1.1 Introduction

This PhD thesis focuses on the mental health and wellbeing of men as they become fathers for the first time. In this introductory chapter, the rationale for the study is presented, which includes a definition of the research problem, the aims and objectives of the study, and a summary of the relevant literature. It also details the researcher's motivation to undertake this study in order to provide a better understanding of their position as a woman, parent and healthcare clinician. The chapter concludes with a structural outline of the thesis, which incorporates peer reviewed publications, and details the overall writing style.

1.2 Background

During the last decade there has been an increased policy emphasis on improving mental health and wellbeing among the general population in England (Department of Health and Social Care, 2018; NHS England, 2018; NHS England, 2019a). The NHS long term plan committed to increasing mental health investment by at least £2.3 billion by 2023/24 (NHS England, 2019a). Mental health has also been highlighted as a priority by the European health and social care agenda (European Commission, 2018) and internationally, by the World Health Organisation (WHO, 2019). Mental health problems constitute the largest single source of world economic burden, with an estimated global cost of £1.6 trillion, greater than cardiovascular disease, chronic respiratory disease, cancer, and diabetes (Insel, 2011). In the United Kingdom (UK), it is the single largest cause of disability, contributing up to 28% of the total burden, compared to 16% each for cancer and cardiovascular disease (Ferrari et al., 2013), with the cost to economy estimated at £105 billion a year (Mental Health Taskforce, 2016). As well as resource implications, mental health has profound effects on an individual's quality of life, and physical and social well-being

(WHO, 2008). There are also wider social impacts, including loss of productivity, reduced levels of education and increased rates of crime (Parsonage et al., 2016). Seventy million days are lost from work each year in the UK due to mental ill health (i.e. anxiety, depression and stress related conditions), making it the leading cause of sickness absence (Davies, 2013). If not adequately addressed, the economic costs relating to mental health are likely to increase rapidly over the next 15 years (Trautmann et al., 2016).

Mental illness is a major risk factor for suicide (Bachmann, 2018), which is currently the biggest killer in men under 50 years of age in the UK (ONS, 2019). In 2018, male suicides accounted for three-quarters of deaths among individuals who took their own lives (4,903 male deaths compared with 1,604 female deaths), a significant increase from 15.5 deaths per 100,000 males in 2017 to 17.2 deaths per 100,000 males in 2018 (ONS, 2019). In a Brazilian longitudinal study of 650 postnatal men (defined as 30 to 60 days postpartum), suicide risk was reported to be nearly 21 times higher for fathers with depression, and 46.5 times higher for fathers with a combination of depression and bipolar disorders, compared to those who did not suffer from any mood disorder in the postnatal period (Quevedo et al, 2011). Fathers' mental health therefore is a major public health issue.

The focus on mental health and wellbeing particularly during the transition to parenthood (the period from conception to one year following birth) is attracting more attention, especially as new parenthood brings about a number of changes and challenges for both the mother and father, but also because it is a time when parents are more likely to be in contact with relevant healthcare professionals and services. It can be a stressful time, with new adjustments to lifestyles and routines which can significantly impact on the mental wellbeing of both parents (Deave et al., 2008; Genesoni and Tallandini, 2009; Asenhed et al., 2014; NCT, 2015; Saxbe et al., 2018; Pinto et al., 2019).

A report from the London School of Economics concluded that perinatal mental health problems carried a total economic and social long-term cost to society of about £8.1 billion for each one-year cohort of births in the UK (Bauer et al., 2014). This report however was based on costs relating to maternal perinatal mental health and included estimates for adverse effects on the child as well as the mother, but did not include any adverse effects on the father or costs relating to fathers' mental health in the perinatal period (Bauer et al., 2014).

While the total cost of paternal perinatal mental health problems is currently unknown, it is likely to be considerable. In a UK study of 192 fathers recruited from two postnatal wards in southern England, Edoka and colleagues (2011) estimated healthcare costs of paternal depression in the postnatal period, using data collection on self-reported resource-use over the first postnatal year. Three groups of fathers were identified: fathers with depression (n = 31), fathers at high risk of developing depression (n = 67) and fathers without depression (n = 94). Mean father–child dyad costs were calculated based on health service resource-use by the father and child, as reported by the fathers, and was estimated at £1103.51, £1075.06 and £945.03 (2008 prices) in these three groups. After controlling for potential confounding factors, including father's age, academic qualifications, ethnicity, employment status, whether the father had other children, child's gender, child's birth weight and a diagnosis of postnatal depression in the child's mother, paternal depression was associated with significantly higher community care costs (mean cost difference of £132), mainly due to increased contacts with general practitioners (GPs) and psychologists between those with and without depression. While this study only estimated costs from a healthcare system perspective and did not consider other sectors of the economy, it nevertheless provides useful preliminary insights into the healthcare costs associated with paternal depression during the postnatal period.

The majority of research into perinatal mental health to date has tended to focus on women. A Cochrane Library systematic review of group-based parenting

programmes for improving parental psychosocial health reported that only four of the 48 included studies reported separate outcome data for fathers (Barlow et al., 2014). While these showed a statistically significant short-term improvement in paternal stress following interventions that included cognitive and behavioural strategies, individual study results were inconclusive for any effect on depressive symptoms, confidence or partner satisfaction. The review authors concluded that this was: *"a serious omission given that fathers now play a significant role in childcare and research suggests that their psychosocial functioning is key to the wellbeing of children*" (Barlow et al., 2014, p-21).

Until recently the UK National Institute for Health and Care Excellence (NICE) guidelines on antenatal and postnatal mental health (NICE, 2014) recommended routine assessment of women, but did not include any reference or recommendations for fathers or partners. In the updated guidelines published in 2018, it was acknowledged that "*the mental health needs of fathers/partners whose health and functioning will inevitably be affected by mental health problems in women, are also important and should be considered*" (NICE, 2018, p-37). This suggested that it is necessary for services to also consider the needs of fathers/partners, carers and other children in the family, with care also tailored to meet their needs, which could include the provision of specialist inpatient services, integration of specific mental health services and maternity services, and dedicated treatment programmes (NICE, 2018). It however fails to inform how these needs will be identified for fathers in the first place, with no recommendation for routine mental health assessment of fathers in the perinatal period. As a result, maternal mental health needs during this period are likely to be more widely recognised by health professionals and better supported. However, men's mental health during their transition to fatherhood remains poorly understood and under-researched, with many new fathers' needs often unmet (Paulson and Bazemore, 2010).

1.3 Significance of the Study

The limited research into men's mental health during their transition to fatherhood undertaken to date has mainly focused on symptoms of anxiety and depression during their partners' pregnancy and within 12 months following birth. In a systematic review of the prevalence and course of anxiety disorders in men across the perinatal period, which included forty-three papers, Leach et al. (2016) reported a prevalence rate for any anxiety disorder in men ranged between 4.1% - 16.0% during their partner's pregnancy and 2.4% – 18.0% during the six to eight week postnatal period. However, the included studies did not report on whether the men had any pre-existing anxiety prior to the perinatal period. Only two studies included control groups of non-perinatal men, with one finding that expecting fathers had significantly higher levels of anxiety than non-fathers (Gerzi and Berman, 1981), and the second study finding that non-fathers had significantly higher anxiety (Teichman and Lahav, 1987). The lack of recent research with appropriate control groups of men who were not fathers makes it difficult to ascertain if the perinatal period is a specific high-risk time for new onset of anxiety in men.

In a separate meta-analysis from 2010, which also included forty-three studies, Paulson and Bazemore reported a prevalence rate of depression in men pre- and postnatally as around 10.4%. In a more recent meta-analysis published in 2016, Cameron et al (2016) reported an estimated rate of paternal depression of 8.4% from pregnancy through the first postpartum year. Of the 74 studies included in this meta-analysis, only 13 reported on participants' history of depression, meaning that prevalence rates reported do not necessarily refer to onset of new cases of depression in men in the perinatal period. Nonetheless, it is clear from evidence that a high number of men suffer from anxiety in the antenatal and postnatal period.

Research from Denmark (Madsen, 2006) and the United States (US) (Paulson et al., 2006) found that new fathers' depression rates were double the national average for men in the same age group who were not fathers. Depression rates

are generally reported to be higher in studies from the US (Paulson and Bazemore, 2010; Cameron et al., 2016), possibly due to the function of differing paternal leave benefits, with the US rated as the second lowest after Switzerland (Ray et al., 2010). Depression in fathers remains an important area for research in other country settings, given the negative impact paternal depression has on maternal mental health (Vismara et al., 2016), and infant development (Ramchandani et al., 2005; 2008; Ramchandani and Psychogiou, 2009; Potapova et al., 2014).

The period from an infant's conception to the age of two is a crucial time for child development, and experiences during this time are likely to influence the rest of the child's life (WAVE Trust, 2013). Similar to the impacts of maternal depression, a number of negative implications for the child have been associated with mental health problems in fathers. This includes a father's capacity for sensitive parenting, where they may not be able to attune to their baby's cues and signals and respond accordingly. Studies have shown that fathers who are affectionate, supportive and involved in their child's care and upbringing, contribute positively to their child's cognitive, language and social development (Cabrera et al., 2013; Machin, 2018), with the potential to generate social, academic and economic benefits in the future (Pleck and Masciadrelli, 2004; Flouri, 2005; Sarkadi et al., 2008; Jeynes, 2014; Gordon, 2017). Close connections with their children are linked to positive outcomes for fathers themselves, such as reporting of greater satisfaction with family life (Feldman et al., 2004; MenCare, 2015), unusually high levels of satisfaction in mid-life (Snarey, 1993), and less likelihood of experiencing separation/divorce (Olah, 2001). Other benefits to fathers include reporting greater confidence and self-esteem (Lewis et al, 1982; Stile and Ortiz, 1999; MenCare, 2015); feeling more effective as parents (DeLuccie, 1996); and finding parenthood more satisfying (Owen et al., 1982). Conversely mental health problems in fathers are associated with cognitive, emotional, social and behavioural problems in children (Flouri, 2005; Ramchandani et al., 2005; Ramchandani et al., 2008; Ramchandani and Psychogiou, 2009). As fathers can also play a crucial role in supporting the health and wellbeing of their partners (Fisher et al., 2006;

Pilkington et al., 2015), support for new fathers and addressing their mental health needs could make an important contribution to the wellbeing of families and wider society.

Midwives and health visitors in the UK National Health Service (NHS) provide routine care to all pregnant and postnatal women and their partners (if present), as part of universal health services, with health visitors having the most extended period of contact with families, from pregnancy up to five years post birth. They are therefore in an ideal position to offer interventions aimed at improving parents' mental health and wellbeing during and beyond the six to eight week postnatal period, which marks the end of a woman's maternity care. The transition to parenthood was identified as one of six high impact areas by the Department of Health in England in 2014, where early intervention could make a difference to shorter and longer term family outcomes (DH, 2014). The national Healthy Child Programme (HCP) which was originally published in 2009 (DH, 2009) and reviewed and updated in 2015 (PHE, 2015), recognised the importance of this early intervention and the need for health professionals to work effectively with parents to ensure that their children have the best start in life. The 2009 version stated that it was time for the programme to focus on working routinely with both parents (whether they are living together or not), rather than the traditional focus being mainly placed on women and children (DH, 2009). As a result, greater emphasis was placed on health visitors, as lead health professionals for the delivery of the HCP in England, to work more closely with fathers (DH, 2009; PHE, 2015). Adult and child mental and physical health are affected by the quality of the couple relationship within the family; the more couples that can manage their conflicts in a cooperative way, the better the outcomes for their children (Hewison, 2013). By focusing on a couple's intimate relationship and exploring their feelings about the transition to parenthood and the likely changes to the relationship, health visitors can make a significant contribution to mental health and wellbeing of families with new babies (Coleman et al., 2013; Hewison, 2013).

In England every family with a child under the age of five will have routine access to a health visitor, who is required to undertake a minimum of five contacts (PHE, 2018a) as follows:

1. Antenatal health promoting visit
2. New baby review
3. Six to eight week assessment
4. One year assessment
5. Two to two-and-a-half-year review

Through these contacts, health visitors can support new parents in their transition to parenthood, promote child development, improve child health outcomes and ensure that families at risk are identified at the earliest opportunity (PHE, 2018a). The first three of the five contacts provide ideal opportunities to carry out comprehensive and holistic assessments of the expectant/ new mother's and father's needs. The Department of Health for England stated that the six to eight week health visitor visit "*is crucial for assessing the baby's growth and wellbeing alongside the health of the parent, particularly looking for signs of postnatal depression. It is a key time for discussing key public health messages, including breastfeeding, dental health, healthy start vitamins, immunisations, sensitive parenting and for supporting parents on specific issues such as sleep*" (DH, 2015a, p-17). The six to eight week assessment by the health visitor is in addition to the review of the woman and baby that is usually carried out by the GP. While the six-to-eight week postnatal check for mothers and babies are considered to be 'best practice' (NICE, 2015), they were not being offered routinely by all GPs across the country due to these checks not being specified in the current (up to March 2020) General Medical Services contract as a requirement for GPs to provide (NHS England, 2019b). The updated 2020/21 contract for GPs however includes a maternal check at six to eight weeks after birth, which is due to start from April 2020 (NHS England and BMA, 2020). This highlights some of the current gaps and complexities around postnatal care in England.

While clear guidance has been set out by NICE (2014, 2018) and the Department of Health (2012a) in England for assessing maternal mental health at these routine contacts, currently there are no national guidelines for assessing paternal mental health. This means that while the HCP emphasises the need for health visitors to work more closely with fathers, as mentioned earlier, there are no national requirements or guidance for routine assessments of fathers' mental health at these contacts, which represents a huge gap.

A report commissioned by the NHS in England described the transformation necessary for prevention, access, integration, quality and a positive experience of care, relating to mental health over the next ten years (Mental Health Taskforce, 2016). While this report was based on mental health in the general population, the importance of focussing on maternal perinatal mental health was highlighted, but not paternal mental health. More recently, in what has been described as a 'landmark move' by the developers, NHS England announced future plans for supporting fathers. According to the NHS Long Term Plan, *'Fathers/partners of women accessing specialist perinatal mental health services and maternity outreach clinics will be offered evidence-based assessment for their mental health and signposted to support'* (NHS England, 2019a, p-49). The details of how this support will be delivered, what it would entail, who would provide it and how the clinical skills and competencies of the relevant workforce will be prepared was not described. From a policy perspective, while this is a move in the right direction for fathers, it will only support the small number of men at increased risk of perinatal mental health difficulties (NHS, 2019a). There continues to be a disparity between a growing evidence base, which suggest fathers' mental health during the perinatal period is a significant issue, and national policy where assessment of fathers' mental health is not highlighted within recommendations for routine practice. Consequently, routine clinical practice around fathers' mental health and wellbeing tends to vary significantly. Evidence to support the transition to fatherhood and the development, implementation and evaluation of effective interventions to promote and sustain their mental health and wellbeing are therefore important for policy and practice.

Many health visiting services across England use the Promotional Guide system, a programme to support the transition to parenthood by enhancing parental capacity and change in parenting attitudes and practices in a non-judgemental and supportive manner (Davis and Day, 2010). It consists of two guides, an antenatal guide used with both parents around 4 to 6 weeks before their baby is due, and a postnatal guide used around 6-8 weeks after the birth of the baby. The system is based on the Family Partnership Model and although designed for both parents, the HCP in England currently recommend its use with women during the antenatal contact and the six to eight week postnatal contact carried out by health visitors (PHE, 2015). It is also recommended in the WAVE Trust (Worldwide Alternatives to ViolencE, an international educational charity) report 'Conception to age 2 – the age of opportunity' produced to guide national and local decision-makers and commissioners in how to reduce causes of disadvantage at the earliest and most effective point in life (WAVE Trust, 2013).

The Promotional Guides are currently used face-to-face, by health visitors trained in their use, taking approximately 60 minutes to complete each guide. These guides include questions based around five core themes:

- Health, wellbeing and development of baby, mother and father
- Couple relationship
- Family and social support
- Parent-infant care and interaction
- Developmental tasks of early parenthood and infancy

Although the guides focus on the transition to parenthood as a whole, use could potentially support fathers' mental health and wellbeing during this period (discussed further in Chapter 6 of this thesis).

The first version of the Promotional Guides was produced in 2000 and referred to as Promotional Interviews, for the European Early Promotion Project (EEPP) (Puura et al., 2002). The EEPP was a primary health promotion and prevention

programme provided by health visitors and other community health nurses across five European countries - the United Kingdom, Finland, Greece, Serbia and Cyprus. A total of 824 families were recruited from the five countries involved. The intervention in the study involved specifically designed training of the primary health care professionals and the use of semi-structured promotional interviews as the main intervention tools. The antenatal promotional interview was carried out with women four to six weeks before their baby was due, and the postnatal interview at approximately four weeks after the child's birth (Puura et al., 2002). The topics covered in the antenatal interview included the woman's feelings concerning their current pregnancy, their expectations of the baby, the changes happening to their families, the support they had available from their spouse and other people, their fears about possible problems, and the support that might be solicited (Puura et al., 2002).

The postnatal interview included discussions about how the woman was adapting to the changes in their lives, including issues to do with themselves as parents, their babies, their partners/spouses, social network, and future expectations (Puura et al., 2002). A Needs Checklist was specifically devised for the project, which was completed after both the antenatal and postnatal interview, so that the primary health care workers could make a judgement about the needs of the family (Puura et al., 2002).

Evaluation of this project was carried out by the programme developers and involved assessing families after their postnatal promotional interview (when their child was between six and eight weeks old) and again when the child was 24 months. The assessments involved a detailed interview with the families including an evaluation of the services they received, and a range of self-report questionnaires namely the Family Grid (Davis and Spurr, 1998) to measure parental self-esteem and relationships within the family, the Parenting Stress Index (Abidin, 1990) to measure perceived parental stress, the Infant Characteristics Questionnaire (Bates, 1992) to measure child temperament, the Bayley Scales (Bayley, 1993) to assess the children's development at 24

months, and the Behaviour Screening Questionnaire (Richman et al, 1975) to assess behavioural problems also at 24 months.

The evaluation showed some positive outcomes such as parents' greater satisfaction with and perceived helpfulness of the healthcare professionals trained in the promotional methods; the practicalities of the service in the intervention group were perceived more favourably than the usual services by women in Cyprus, Greece and the UK; and women in all five countries stated that their healthcare professionals made them feel more positive about themselves (Davis and Tsiantis, 2005; Davis et al., 2005; Puura et al., 2005). Additionally, women from Greece reported less depression, greater self-esteem, better relationships with their partners, living in a better environment, finding parenting less stressful, and having better relationships with their children two years following the intervention, compared to the 'usual care group' (Davis et al., 2005). Health visitors in the UK study, trained in using the promotional interviews with women, reported increased identification of need in families than those who were not trained (Davis et al., 2005).

There was however no evidence of benefit at the initial assessment, when the infants were between six and eight weeks old. Furthermore, evidence of benefit of the intervention cannot be assumed as there were no 'control' families, parents were not assessed before the intervention, research methods across the studies varied widely, and cultural and socioeconomic differences among included participants and healthcare professionals across the different countries did not enable direct comparisons to be made (Davis et al., 2005).

The contents of the Promotional Interviews were subsequently updated to reflect the latest developmental science and practice (Barlow and Day, 2016). These became the Antenatal and Postnatal Promotional Guides and Guidance notes (Day, 2012a; 2012b). Since the inclusion of the Promotional Interviews in the HCP (DH, 2009), the first study examining the implementation of the

Promotional Guides in the UK reported that the guides were rated highly by providers (health visitor) and recipients (women) (Barlow and Coe, 2013). This was a mixed-methods evaluation which aimed to assess the level of implementation and stakeholder perceptions, using an online survey with trained health visitors and interviews with key stakeholders (health visitors/ managers, and women receiving the intervention). Questionnaires were completed by 47 health visitors (46% of those invited), only 6 (13%) of whom were using the Antenatal Promotional Guides with all women and 13 (29%) the Postnatal Promotional Guide. It is unclear as to how the remaining 28 health visitors were using the Promotional Guides in practice.

From interviews with managers (clinical leads for health visiting, n=6) and health visitors (n=7), the Promotional Guides were reported to provide opportunities to identify problems early, and to build relationships with parents in a meaningful and therapeutic way. Although this was a very small study, carried out in one NHS setting in London, and the implementation of the intervention was low, qualitative findings from interviews with seven women suggested that they were appreciative of the listening, support and guidance provided by the health visitors through the Promotional Guide contacts (Barlow and Coe, 2013). Fathers however were not included in this study and it is not clear whether they were involved when the Promotional Guides were used by health visitors with women in this study.

More recently, the 'Rapid Review to Update Evidence for the Healthy Child Programme 0–5' stated that "*further research is needed to examine how effective promotional interviews are in identifying women in need of further support, and improving outcomes*" (PHE, 2015; p-40). Despite the lack of robust evidence for its use in the UK, the Promotional Guides are now used by health visitors in eighty-five NHS trusts across England. While there are a number of service audits currently taking place at sites where this intervention has been implemented, no primary research studies are currently underway (as searched on UKCTG and ClinicalTrials.gov website), and questions relating to the level of

engagement and acceptability especially by fathers remain unknown, as well as whether the intervention is likely to be of benefit.

In recent years another licensed parenting programme, the Family Nurse Partnership (FNP), was rolled out in the UK with minimal evidence of benefit in a UK population, with one large randomised controlled trial (Building Blocks Trial) of 3251 women in England finding no positive association with anticipated benefits (Robling et al., 2016). Additionally, in a cost-utility analysis carried out alongside the Building Blocks trial, the average cost of the FNP intervention was calculated to be £1812 more per participant compared to usual care, leading the authors to conclude that "*FNP does not represent a cost-effective intervention when compared with existing services already offered to young pregnant women*" (Corbacho et al., 2017, p-1373). The FNP programme continues to be delivered in England, but was adapted following the Robling et al. (2016) trial to test "*a series of innovations and improvements to strengthen outcomes, increase cost effectiveness, ensure greater flexibility and share learning with other services*" (Rothman, 2016, p-172).

This emphasises the need to ensure that interventions aimed at improving health outcomes are based on robust evidence of clinical and cost effectiveness and appropriate research is undertaken, with appropriate shorter and longer term follow-up to ensure that the intervention is effective in achieving the desired outcomes in the target population, prior to full implementation.

1.4 Defining the Research Problem

The research problems identified in relation to fathers' mental health are twofold: firstly, as highlighted above, limited research has been undertaken in this area. While the evidence that is available suggests that the rates of mental health problems in new fathers and impacts on the family are significant (Ramchandani et al., 2005; 2008; Deave et al., 2008; Genesoni and Tallandini,

2009; Asenhed et al., 2014), UK policies for maternal and child health services do not address this adequately. To support men's mental health and wellbeing during their transition to fatherhood it is essential to understand their experiences and the specific needs they may have during this period.

Secondly, there are few evidence-based interventions designed specifically to support fathers' mental health and wellbeing (PHE, 2015). While the Promotional Guide system described above is an intervention aimed at mothers and fathers to support their transition to parenthood, there is even less evidence of its benefit for fathers. Service audits and case studies report positive feedback from 'parents' (Barlow and Coe, 2013; Day et al., 2014; DH, 2015b), but tend to mainly focus on the 'mother'. It is not known whether fathers are routinely offered the intervention, whether they are willing to participate in it and whether they find it helpful with respect to supporting their mental health and wellbeing. More research on the use of the Promotional Guide system is necessary to inform good practice if proposed benefits on fathers are to be realised.

1.5 Overall Study Design

The studies presented in this thesis were informed by the Medical Research Council (MRC) framework for developing and evaluating complex interventions. In study *phase III*, while an existing intervention was evaluated rather than developed, this framework still provides a useful guide for considering all aspects of the evaluation process for complex interventions. In Chapter 3 of this thesis, the MRC framework is discussed in more detail, outlining the rationale for choosing the study design, and why the Promotional Guide system is considered to be a complex intervention.

1.6 Research Aims and Objectives

The primary aim of this research was to explore first-time fathers' needs and experiences during their transition to fatherhood (defined as the period from conception to one year after birth), with a particular focus on their mental health and wellbeing.

The secondary aim was to test the feasibility of health visitors' use of the Promotional Guide System with first-time fathers and assess if the new fathers found this to be an acceptable intervention which met their mental health and wellbeing needs.

Three research questions were developed to meet the study aims, which were addressed through three study phases as outlined below:

Research question 1: What is already known about men's mental health and wellbeing during their transition to fatherhood?

Study phase I: A systematic review of the qualitative evidence of first-time fathers' experiences of transition to fatherhood in relation to their mental health and wellbeing.

Research question 2: How do first-time fathers perceive their mental health and wellbeing needs during this transition?

Study phase II: A qualitative exploratory study of first-time fathers' experiences and perceived mental health and wellbeing needs during their transition to fatherhood.

Research question 3: Is the use of the Promotional Guide System acceptable to first-time fathers as an intervention to support their mental health and wellbeing, and to the health professionals responsible for delivering the intervention? How feasible is the implementation of the Promotional Guide

system with new fathers by health visitors as part of their routine practice and what is the fidelity of programme delivery?

Study phase III: A feasibility study of the use of the Promotional Guide system by first-time fathers to support their mental health and wellbeing, and the health professionals responsible for delivering the intervention.

Table 1 provides a summary of each phase of the study.

Findings from this study would enable better understanding of first-time fathers' mental health and wellbeing needs, which could guide the way in which men are supported by health services during the perinatal period. Information from the feasibility study would provide vital information for carrying out a future trial to test the effectiveness of the Promotional Guide intervention with fathers.

Table 1: Summary of the three study phases

Study Phase	Aim/ Objectives	Research Question	Study Method	Data Generated
I	To explore first-time fathers' needs and experiences during their transition to fatherhood	What is already known about men's mental health and wellbeing during their transition to fatherhood?	Systematic review	Qualitative
II	To develop an insight into first-time fathers' mental health and wellbeing needs, focusing specifically on the gaps identified in the systematic review in study phase I.	How do first-time fathers perceive their mental health and wellbeing needs during this transition?	Exploratory study	Qualitative
III	To test the feasibility of health visitors' use of the Promotional Guide System with first-time fathers and assess if the new fathers found this to be an acceptable intervention which met their mental health and wellbeing needs.	Is the use of the Promotional Guide System acceptable to first-time fathers as an intervention to support their mental health and wellbeing, and to the health professionals responsible for delivering the intervention? How feasible is the implementation of the Promotional Guide system with new fathers by health visitors as part of their routine practice and what is the fidelity of programme delivery?	Feasibility study incorporating a process evaluation	Qualitative and quantitative
Summary	*To provide an overview of the whole research project with study findings of each stage and explanations of how they link with each other. The overall findings are discussed in the context of existing literature, study strengths and limitations, implications for practice, policy and future research.*			

1.7 Researcher's Motivation for this Study

My motivation for this research topic is professional and personal. As a midwife I predominantly worked with women and their new-born babies. Later when I trained to become a health visitor in 2002, my remit was to work with families with children under five years of age. Although this was the case in theory, in practice, I was still very much working with women and children, and fathers were mostly invisible. This was due to the health visiting working hours being between 9am – 5pm, Monday to Friday, when most men were generally at work. While the health visiting service is designed to offer support to both parents, in practice there was clearly a gap. This gap was reinforced by the lack of fathers being mentioned in the local and national policies that influenced health visiting practice.

Being interested in perinatal mental health, I trained with the Institute of Health Visiting (IHV) to become a Perinatal Mental Health Champion in 2013 and started delivering perinatal mental health training initially to health visiting teams but then to a range of other professionals to include GPs, practice nurses, midwives, nursery nurses, and other early years workforce. While the training included prevalence rates of depression in fathers and the impact it had on the mother and child, it did not include any intervention or support that professionals could offer new fathers. As a result, I started looking into this further and realised the extent of the gap relating to fathers' mental and wellbeing, and the lack of support available.

Health visitors play a vital role in improving health and tackling inequalities (IHV, 2019). Being a health visitor, this was very important to me as I have always believed in providing an equitable service to families, and in this case, fathers were receiving minimal support from health visitors, compared to mothers. The identification of a gap in professional services and my curiosity to find ways to improve outcomes for children and families motivated me to investigate fathers' mental health and wellbeing during their transition to fatherhood.

This research also fits in well with the four principles of health visiting, first published in 1977, which are to search for health needs; stimulate an awareness of health needs; influence policies affecting health; and facilitate health-enhancing activities (Council for the Education and Training of Health Visitors, 1977). Although these principles have been revisited several times since (Cowley and Frost, 2006), they continue to underpin health visiting training and practice today. This was also an influential factor in my decision to pursue a clinical academic career rather than a purely academic one.

My personal motivation for the topic comes from my own experience of becoming a parent in 2007. The lack of services available to fathers at the time became apparent to me when my husband constantly reported feeling like an 'outsider' or being 'watched' and 'judged' by other mothers and health professionals when he visited local parent/baby groups or child health clinics with our daughter (without me). After a few attempts, he stopped attending. My personal curiosity was to find out whether new fathers still have similar experiences or whether things have changed 12 years on.

Combining my personal and professional curiosity along with the desire to make a difference has led me on this journey to research first-time fathers' mental health and wellbeing. Describing my motivation for this study was important because the researcher's professional background and personal experiences can affect the study's focus, planning, interpretation and analysis (Sorsa et al., 2015). Being reflective both before and during the research process and being reflexive by clearly articulating my position as a researcher will allow the readers better context and understanding of the study (Sutton and Austin, 2015).

1.8 Overview of Writing Style and Thesis Structure

This thesis has been written incorporating publications, which is a variant of the traditional UK PhD thesis, and was selected to allow the inclusion of published peer reviewed papers to form part of the chapters within the thesis. It is recognised that due to the word restriction of published papers, some sections may not provide adequate detail, therefore where publications have been incorporated in chapters (Chapters 4 and 5), additional supplementary information has been included.

Presenting the thesis in this way has also meant that the conventional research reporting format was not used, where methods and findings are presented in different chapters. Instead each phase of the study has been presented in separate chapters, with explanation of how each phase links in with the subsequent phase of the study (Table 1, pg-37).

This thesis has mostly been written in the third person, however where it was necessary for the researcher to be critically reflexive and provide an account of their relationships with those who were being researched, a first-person style has been adopted.

The thesis is presented in eight chapters. The first chapter presents an introduction to the subject, outlining the research problem and objectives of the study, defining the central ideas and concepts. It also provides an overview of the literature and rationale for the selected research methods. The second chapter presents a detailed review of the literature relating to fathers' mental health and wellbeing during their transition to fatherhood. This includes a definition of mental health and wellbeing, the changes fathers may experience with respect to these during this period, the risk factors, signs and symptoms, and the impact of poor mental health. It also presents an overview of the health visiting service in England.

Chapter three outlines the overall research design and methodology. In this chapter the MRC framework is discussed, the underpinning theory for the intervention presented and the rationale for describing the Promotional Guide as a complex intervention. This chapter also describes the patient and public involvement in the study and issues relating to research governance.

Chapter four presents phase one of the study, namely a qualitative systematic review conducted through the Joanna Briggs Institute, the findings of which were published in a peer-reviewed paper (Baldwin et al., 2018). This chapter describes the literature search process, presents the findings of the review and concludes with implications for practice and future research.

Chapter five presents phase two of the study, a qualitative exploratory study of first-time fathers' experiences, mental health and wellbeing needs during their transition to fatherhood. It incorporates a published peer-reviewed paper (Baldwin et al., 2019) and presents the background to the study, aims and objectives, rationale for the methodology, as well as details of data collection, findings, limitations and implications for practice and research.

Chapter six provides an overview of the chosen intervention. It describes a theory of change developed and presents a logic model, identifying the key components of the intervention.

Chapter seven presents phase three of the study, a feasibility study with a nested process evaluation. This chapter assesses the intervention by exploring the level of engagement, feasibility, acceptability, fidelity of delivery and reported impact on first-time fathers' mental health and wellbeing.

Chapter eight is the final chapter of this thesis, where an overview of the whole research project is presented. It discusses the study findings of each stage and how they link with each other. The overall findings are discussed in the context of existing literature, study strengths and limitations, implications for practice, policy and future research. In this chapter the author's reflections of the whole project are also incorporated.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter explores the literature relating to fathers' mental health and wellbeing during their transition to fatherhood. It begins with defining mental health and wellbeing in general, then narratively reviews the current literature on men's mental health and wellbeing as they become fathers for the first time. It includes discussions of the risk factors for mental health problems, the signs and symptoms men may display and the impact of paternal mental health problems on the whole family. Evidence on interventions to support fathers' mental health and wellbeing, the current policy context and barriers to engagement are presented. The chapter concludes with a summary of the literature reviewed and the gaps identified.

2.2 Mental Health and Wellbeing

In recent years there has been an increased emphasis on improving mental health by promoting mental wellbeing rather than just treating mental health problems, as described earlier. The Royal Society for Public Health in the UK have recommended the importance of actively promoting positive mental wellbeing rather than just focussing on preventing and treating mental illness (RSPH, 2014). Good mental health and wellbeing not only influences a wide range of outcomes for the individuals concerned but can contribute to many social and economic benefits (WHO, 2005; DH, 2011). While this is clear, the terms mental health and wellbeing are often used interchangeably in the literature and many definitions exist for these concepts.

According to the World Health Organisation (WHO), mental health is not just the absence of mental disorder. It is "*a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can*

work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2004, p-1). The three core components of this definition are (1) well-being, (2) effective functioning of an individual, and (3) effective functioning for a community (WHO, 2005, p-10). Mental health therefore influences how a person thinks and feels about themselves and others, how they interpret events, their capacity to form, sustain and end relationships, and their ability to cope with change, transition and life events (Friedli, 2000).

Research on mental wellbeing, which is one component of mental health, differentiates between two types of wellbeing: hedonic wellbeing, and eudaimonic well-being. Hedonic wellbeing is described as subjective wellbeing involving emotions such as feelings of happiness, satisfaction, interest in life and the avoidance of pain (Keyes, 2007), whereas eudaimonic wellbeing is psychological wellbeing which relates to individual strivings for optimal functioning including social relationships, and self-realisation; perceptions of whether the things they do in life are meaningful or worthwhile. (Ryff 1989; Ryan and Deci, 2001). Several longitudinal studies have found an association between high levels of psychological wellbeing and decline in mental illness, suggesting psychological wellbeing could act as a protective factor against mental disorders (Keyes et al., 2010; Wood and Joseph, 2010; Lamers et al., 2015; Weiss et al., 2016). In addition to subjective and psychological wellbeing, Keyes (2002) believes that social wellbeing is necessary for one to be 'mentally healthy'. Therefore, mental health could be described as an overarching term for emotional, psychological and social well-being (Keyes, 2005; 2007; Westerhof and Keyes, 2010).

The UK government's call to action in the mental health strategy (DH, 2011), highlights the need for improved interventions to enhance mental health and wellbeing of the population. In a recent meta-analysis of 27 randomised control trials Weiss et al. (2016) reported a positive effect of behavioural interventions on psychological wellbeing in the general population (male and female, age ranging from 11-79 years). Fourteen of these studies were conducted among

non-clinical populations (e.g. employees, students) and 13 studies used a clinical sample, most of whom had affective disorders. Only two studies were based on a population with physical complaints, such as hearing impairment and chronic pain (Weiss et al., 2016). The reviewers concluded that it was possible to improve psychological wellbeing with behavioural interventions, with face-to-face interventions the most promising (Weiss et al., 2016). However, the heterogeneity of included studies was a limitation.

While the terms mental health and wellbeing are both complementary to one another, they are also inter-linked and indivisible in the literature and therefore will be used interchangeably in the rest of this thesis.

2.3 Men's Mental Health and Wellbeing During Their Transition to Fatherhood

Perinatal mental health is an umbrella term that encompasses mental health problems, psychological distress and psychological wellbeing from conception to one year after birth. It can include pre-existing mental health conditions as well as the onset of new ones (O'Hara and Wisner, 2014), and focuses not only on treating and preventing mental health problems, but also the promotion of psychological wellbeing (NICE, 2014; Weiss et al., 2016).

Men's mental health and wellbeing, including first-time fathers, is a public health issue which to date has not received the same level of attention as women's mental health in the perinatal period (Paulson and Bazemore, 2010). Previous studies which asked men about their role have reported that they felt unsupported when becoming fathers due to lack of opportunity to learn parenting skills from their own fathers, although this could reflect a time when men were likely to be less involved with childcare (Condon et al, 2004). In addition to this, fathers may feel side-lined during the perinatal period. A literature review which included thirty-two studies published between 1989 - 2008 on men's psychological transition to fatherhood, found pregnancy to be

the most demanding period for the fathers' psychological reorganisation of self, and labour and birth to be the most emotional moments involving highly mixed feelings, ranging from helplessness and anxiety to pleasure and pride (Genesoni and Tallandini, 2009). The postnatal period (defined by the authors of the review as up to one year following birth) however was the most challenging time, due to fathers having to balance various demands placed on them, including personal and work-related needs, their new role as a parent, emotional and relational needs of the family, and societal and economic pressures (Genesoni and Tallandini, 2009). A key element identified was the importance of the quality of the man's relationship with his partner across the antenatal, intrapartum and postnatal periods. The review focussed on men's experiences from Western cultures, most of the studies were from the USA (11) and Australia (9), and a small number from the UK (4), Canada (3) Ireland (1), Sweden (3), and Finland (2). Studies included resident fathers, but did not include non-biological fathers such adoptive fathers, stepfathers or fathers in same sex relationships. As such, the experiences of non-biological fathers during their transition to fatherhood remains unknown.

There are wide variations in the reported prevalence rates of depression in fathers in the perinatal period. In an integrative review of twenty studies Goodman (2004) reported depression in fathers (both first-time and subsequent) to range from 1.2% - 25.5% in the first year following birth of their baby. With the exception of one study, which assessed depression through the signs and symptoms reported in a qualitative interview, all studies in this review used standardised self-report screening instruments with established reliability and validity, including the Edinburgh Postnatal Depression Scale (EPDS) (Cox et al., 1987), Beck Depression Inventory (BDI) (Beck, 1996), General Health Questionnaire (GHQ) (Goldberg, 1978), and the Centre for Epidemiological Studies-Depression (CES-D) (Radloff, 1977). There were several limitations with the review. These included that the timing of data collection varied significantly from one to eight weeks post birth, and a number of different instruments were used across the studies to measure depression with differing sensitivities and specificities.

Using data from the Avon Longitudinal Study of Parents and Children (ALSPAC), a large longitudinal cohort study, which included 8431 fathers, Ramchandani et al (2005) reported the presence of depressive symptoms in 4% of fathers at eight weeks after birth based on the use of the EPDS. While the EPDS is not a diagnostic tool and was initially developed to screen pregnant and postnatal women (Cox et al., 1987), it has been validated for use with fathers (Matthey et al., 2001; Cox et al., 1996) and a score of over 12 is associated with a major depressive disorder in men with a high specificity (94.9%) and sensitivity (100%) (Massoudi, 2013). However, a later meta-analysis of forty-three studies reported depression in 10.4% of fathers between the first trimester of their partner's pregnancy and one year postpartum, with the peak time of three to six months postnatally, a rate similar to findings for postnatal women (Paulson and Bazemore, 2010). This suggests that prevalence rates based on screening at around 8 weeks postnatal may not accurately reflect the extent of this problem. Similar to the study by Genesoni and Tallandini (2009) described earlier, studies included in the meta-analysis used different methods of measuring and identifying depression: self-report scales were used in forty studies and structured or semi structured interviews used in three (Paulson and Bazemore, 2010).

In another literature review of twenty-one studies exploring mental health problems experienced by fathers in the first year after their baby's birth, Bradley and Slade (2011) reported a prevalence of depression of around 1% to 8% in the first six weeks, and 5% to 6% at three to six months after birth. Few studies incorporated matched control groups, again making comparisons of prevalence rates across studies difficult. Nonetheless findings from this review and the previous meta-synthesis (Paulson and Bazemore, 2010) suggests that men may be more at risk of experiencing depressive symptoms during the first six months after becoming a father.

An updated meta-analysis of prevalence rates of paternal depression reported an estimated rate of paternal depression of 8.4% (95% confidence interval [CI], 7.2–9.6%) from pregnancy through the first postpartum year (Cameron et al.,

2016). This meta-analysis included studies published from January 1980 to November 2015, with a total of 74 studies providing data on 41,480 participants. Prevalence varied significantly between the included studies. For example, North American studies reported higher prevalence estimates (around 13%), and measurement methods such as diagnostic interviews diagnosed depression significantly less often compared to self-report measures (Cameron et al., 2016). Like previous findings (Paulson and Bazemore, 2010; Bradley and Slade, 2011) the prevalence estimates for paternal depression were reported to be relatively higher in the three to six month postpartum period and lower in the second trimester of their partner's pregnancy, but in this study the rates were not conditional on the timing of assessment (Cameron et al., 2016). In contrast to previous studies, paternal age, education, parity, and history of depression did not significantly moderate rates of depression in fathers. The authors suggested that this non-significant finding could be due to the limited number of studies which adequately reported sociodemographic factors to enable them to be included in the analyses.

Other mental health problems, including anxiety and stress, have also been reported by men during and after their partner's pregnancy (Matthey et al., 2003; Johnson and Baker, 2004; Gao et al., 2009; Moss et al., 2009; Figueiredo and Conde, 2011). A systematic review which included forty-three papers reported that the prevalence rates for any anxiety disorder in men ranged between 4.1% - 16.0% during their partners' pregnancy and 2.4% – 18.0% during the postnatal period (Leach et al., 2016). Anxiety disorders measures included Generalised Anxiety Disorder (GAD); Acute Adjustment Disorder with Anxiety (AADA); Panic Disorder (PD); Obsessive Compulsive Disorder (OCD); and Post-Traumatic Stress Disorder (PTSD). This review included papers on expectant fathers, as well as first-time and multiparous fathers in the first twelve months postpartum. Anxiety was assessed either by structured clinical diagnostic interviews or validated self-report anxiety scales. The majority of included studies reported findings based on measures of depression as well as anxiety, suggesting that depression and anxiety may coexist. However, as the review only focussed on prevalence rates of anxiety, it may not represent the

complete picture of mental health problems experienced by fathers. Many papers within the review did not report on men's past psychiatric history and therefore, it is unclear whether anxiety reported during the perinatal period were 'new cases' or pre-existing ones.

Other severe mental health illnesses relating to women in the perinatal period include bipolar disorders and psychosis (Jones et al., 2014), however there is little research available on these areas relating to men's perinatal mental health. In their review, Bradley and Slade (2011) found only one paper relating to bipolar disorder in fathers (Davenport and Adland, 1982), which did not clearly identify whether any of the bipolar episodes were first-time or recurrent episodes. It is therefore unclear whether becoming a father had triggered bipolar disorder in previously well men.

Bradley and Slade (2011) also included 11 studies relating to psychosis in fathers. On synthesising the findings from these studies of 21 individuals who had a diagnosis of psychosis, 13 of the men became psychologically unwell after the births of their babies, and eight men who presented with psychological symptoms during their wives' pregnancies became more mentally unwell after their babies were born (Bradley and Slade, 2011). The risk factors for psychosis in these fathers included having a problematic relationship with their own parents, loss of their parents when young, parental psychological problems, difficult early experiences, problems in the marital relationship, service in the armed forces and higher socio-economic status. Apart from one study, which reviewed the case records of 169 men admitted to hospital with paranoid psychoses (Retterstøl,1968), no further details were provided about the total sample size, fathers' characteristics, or how psychoses were assessed, making the interpretation of findings difficult.

Only two qualitative studies were identified to inform this chapter, which had specifically explored men's own experiences of mental health and wellbeing during the perinatal period. The first was a study by Edhborg et al. (2016),

which involved semi-structured interviews with 19 first-time fathers in Sweden, who reported depressive symptoms at three to six months postpartum. Depressive symptoms were measured using two self-reported questionnaires – scoring 10 or more on the Edinburgh Postnatal Depression Scale (EPDS) (Cox et al., 1987) and/or 13 or more on the Gotland Male Depression Scale (GMDS) (Zierau et al., 2002). The GMDS has been validated in a Swedish population of men, a score of 13 or more indicating possible depression (Zierau et al., 2002), and was used in this study as a complement to the EPDS to improve the recognition of depression in new fathers. Findings suggested that fathers' pre-birth expectations of fatherhood often did not reflect the reality post birth, leaving them feeling a 'loss of control and powerlessness' (Edhborg et al., 2016). They experienced difficulties in balancing the competing demands of family, work, and their own needs, similar to findings of Genesoni and Tallandini (2009). Fathers also reported struggling with impaired relationships with their partners. While the fathers in this study (Edhborg et al., 2016) reported experiences of depressive symptoms three to six months postpartum, many no longer considered that they were depressed when interviewed at between six and 14 months postpartum. Some fathers were offered interventions for their depression, including counselling and self-help books. Additionally, as the interviews were retrospective, it is possible that some fathers' recollection of their experiences may not have been as accurate, increasing the risk of recall bias. It is also possible that data saturation was not achieved as recruitment did not continue till the point of saturation as acknowledged by the authors. Another limitation of this study was the lack of social heterogeneity of the participants, as most of the fathers had a university degree and all lived in the city of Stockholm. Interestingly, in this study fathers scoring 10 or above on the EPDS were considered to be depressed, whereas when validated for fathers (Cox et al., 1996; Matthey et al., 2001), a score of over 12 was associated with a major depressive disorder with a high specificity (94.9%) and sensitivity (100%) (Massoudi, 2013).

The second qualitative study identified was of 19 first-time and subsequent fathers, carried out as part of Born and Bred in Yorkshire (BaBY)

(www.bornbredyorks.org), a population-based prospective cohort study of babies and their parents (Darwin et al., 2017). The study was undertaken in four sites across North Yorkshire and East Lincolnshire between 2011 and 2014. Through in-depth interviews with fathers at between five and ten months postpartum, Darwin et al. (2017) reported four main themes: 'legitimacy of paternal stress and entitlement to health professionals' support', 'protecting the partnership', 'navigating fatherhood', and 'diversity of men's support networks'. Fathers in this study reported increased levels of stress in the perinatal period. Despite this, they did not feel that their needs were as important as their partners, rather their partner's needs should be prioritised over theirs. The authors concluded that "*men may be reluctant to express their support needs or seek help amid concerns that to do so would detract from their partner's needs*" (Darwin et al., 2017, p-2).

Limitations of this study included a lack of diversity among the participants, similar to the Swedish study discussed (Edhborg et al., 2016). Fathers from different ethnic and socioeconomic backgrounds may have differing views and experiences concerning paternal perinatal mental health, which may not have been captured. Furthermore, study inclusion criteria required completion of a Mental Health and Wellbeing questionnaire with several psychological outcome measures, including the Public Health Questionnaire (PHQ-8 and PHQ-15), Generalised Anxiety Disorder scale (GAD-7) and the List of Threatening Events (LTE). Those not completing the questionnaire were not eligible to take part, which may have detracted fathers from participating in the study, especially those whose first language was not English. The authors also reported that data saturation was not reached through the 19 interviews carried out, which suggests other useful information relating to fathers' experiences during the perinatal period may have been missed. As only biological fathers were included, the experiences and views of non-biological fathers remain under-researched.

2.4 Risk Factors for Mental Health Problems in Fathers

Several risk factors for anxiety and depression in men during and following transition to fatherhood have been reported in literature reviews. These include an unsupportive marital relationship, paternal unemployment, immaturity, unplanned pregnancy (Ballard and Davies, 1996; Schumacher et al., 2008; Bradley and Slade, 2011); history of depression, young parental age and higher social deprivation (Davé et al., 2010); poor social and emotional support (Boyce et al., 2007; Castle et al., 2008), having a partner with elevated depressive symptoms or depression, and poor relationship satisfaction (Wee et al., 2011).

In a cross-sectional study of 622 first-time expectant fathers in Canada who completed an online questionnaire, Da Costa et al. (2015) reported factors associated with antenatal depressive symptoms included poorer sleep quality, family history of psychological difficulties, lower perceived social support, poorer marital satisfaction, more stressful life events in the preceding six months, greater number of financial stressors, and elevated maternal antenatal depressive symptoms. Data were based on expectant fathers during their partner's third trimester of pregnancy. The sample was well-educated and predominantly middle-class, which limits the generalisability. Nevertheless, findings are not dissimilar to those reported earlier in this chapter (Boyce et al., 2007; Castle et al., 2008; Davé et al., 2010; Bradley and Slade, 2011; Wee et al., 2011), however causality cannot be established due to the study design.

Hanson et al. (2009) found that before the birth, fathers often expressed fear for the safety of the woman and the baby, anxiety and fear about observing their partner in pain, feelings of helplessness, lack of knowledge about the birthing process, and concerns about risks of interventions such as operative delivery, limited finances and parenting skills. High anxiety and depressive symptoms during pregnancy were reported as the most significant predictors of depression in men in the postnatal period among those participating in the ALSPAC study referred to earlier (Ramchandani et al., 2008). Younger fathers are more likely than older fathers to have pre-existing serious anxiety, depression and conduct

disorder, and some young fathers may enter parenthood with existing poor mental health (PHE, 2016), increasing their risk during the perinatal period.

An Australian longitudinal study of 327 healthy couples with a first-time pregnancy, reported 20% of mothers and 12% of fathers were significantly 'distressed' at mid-pregnancy, which persisted until the early postpartum period (Morse et al., 2000). Outcome measures, which were administered at several time-points, included the EPDS (Cox et al., 1987), Positive and Negative Affect Scales (PANAS) (Watson et al., 1985), Depression Inventory (short form) (Reynolds and Gould, 1981), State Anger and Anxiety Scales (Spielberger, 1979), Spanier Dyadic Adjustment Scale (short form) (Sharpley and Rogers, 1984), the Intimate Bonds Questionnaire, Social Support Questionnaire (Wilhelm and Parker, 1988), and Masculine and Feminine Gender Role (Gillespie and Eisler, 1992). Younger age, negative mood, poor relationship functioning, gender role stress (particularly performance failure regarding work and sex in males) and low social support predicted distress in mid-pregnancy; whereas negative mood in partner and self, and poor relationship functioning at mid-pregnancy predicted vulnerability to postnatal distress (Morse et al., 2000).

In another Australian longitudinal study, data on 3219 biological resident fathers reported risk factors associated with psychological distress postnatally were poor job quality, poor relationship quality, maternal psychological distress, having a partner in a more prestigious occupation and low parental self-efficacy (Giallo et al., 2013). Findings were based on a secondary analysis of data from fathers participating in the infant cohort of the Longitudinal Study of Australian Children (LSAC). Although causality cannot be inferred, of note is that findings reflect those discussed in the previous section, with maternal depression identified as the strongest predictor of paternal depression during the postpartum period (Goodman, 2004; Wee et al., 2011). This was also highlighted by Edward et al. (2015) in an integrative review of 63 articles on paternal depression where mental health problems in fathers following the birth of their child was associated with a father's personal history of depression and

existence of depression in their partner during and after pregnancy. This review however did not make any reference to men's social class, age or ethnicity.

Fathers often experience more difficulties in developing emotional bonds with their babies in the early postnatal period compared to mothers (Edhborg et al., 2005), and the father-infant bond tends to develop more gradually over the first two months postpartum (Anderson, 1996). For some fathers this slow development of attachment could result in feelings of helplessness and depression in the early postnatal period (Pilyoung and Swain, 2007). Men's own expectations of what it means to be a man and a father can play a significant role in their mental health and wellbeing. For example, men have reported their gender role identity requires them to be strong, successful, in control and able to deal with their own problems (Heifner, 1997). Men who identify more closely with these cultural expectations of the male role are more likely to be depressed and less likely to seek help (Good and Mintz, 1990).

The social and cultural expectations of fatherhood however are often conflicting. Recent years have seen a cultural shift in the 'traditional' role of the father, moving away from being perceived as the family breadwinners, with fathers now often expected to be more involved in caring for and nurturing their children (McBride et al., 2005), with a more loving and interactive function as a father (O'Brien, 2005; Genesoni and Tallandini, 2009). However, a study by Hauari and Hollingworth (2009) across four ethnic groups in England found the concept of 'good fathering' was still linked to the role of 'breadwinner'. While the transition to parenthood presents stresses associated with changes to lifestyle, relationships, sleep deprivation and financial pressures, there may be additional pressures to be a 'good father' to meet societal and cultural expectations of 'father' and 'man' (Wee et al., 2013). These factors may contribute to the levels of stress fathers experience during the perinatal period, especially after the birth of their baby (Genesoni and Tallandini, 2009), however more research is needed to explore these issues further (Wee et al., 2013).

Some researchers suggest that biological changes during the perinatal period contribute to depression during this period, however there is limited research in this area for fathers (Pilyoung and Swain, 2007). Based on evidence of postnatal depression in women, Pilyoung and Swain (2007) suggested that perinatal depression in fathers may be caused by hormonal changes occurring during their partners' pregnancy and postnatal period. For example, men's testosterone levels decrease substantially when they live with their pregnant partners (Berg and Wynne-Edwards, 2001) and when they become fathers (Gray and Anderson, 2010), with levels lowest in fathers who are actively engaged in caring for their babies (Gettler et al., 2011). As a result, these fathers are likely to be more sensitive to their babies (Fleming et al., 2002). Although not the focus of this thesis, a significant correlation between low testosterone levels and depression in older men has been noted in other studies (Seidman and Walsh, 1999; Burnham et al., 2003).

Similarly, prolactin, the hormone produced during lactation in women, is higher in men when they become fathers, which is also known to stimulate nurturing behaviour (Gray and Anderson, 2010). Prolactin levels in men rise during pregnancy and continue to rise during the first postnatal year (Storey et al., 2000). Lower prolactin levels could potentially cause a father to experience difficulties in adapting to parenthood and be a risk factor for depression in the perinatal period (Pilyoung and Swain, 2007). While various associations for hormonal changes in men during the perinatal period and depression have been proposed, further research is needed to ascertain whether these biological factors actually increase the risk of mental health disorders in men during this period.

2.5 Signs and Symptoms of Mental Health Problems

Signs and symptoms of depression in fathers may manifest as low self-esteem, hostility, conflict, and anger (Condon et al., 2004; Wang and Chen, 2006; Madsen, 2011) and some men may withdraw or engage in 'escape activities'

such as overwork, sports, gambling, and excessive drinking (Diamond, 2005; Veskrna, 2010). While other signs and symptoms for example feelings of abandonment and powerlessness, may be similarly reported in men and women who are depressed, alcohol and substance abuse may more frequently manifest in men (Madsen, 2011).

A number of general population studies have reported differences in depression symptoms experienced among men and women (Brownhill et al., 2002; Winkler et al., 2006; Grigoriadis and Robinson, 2007; Johnson et al., 2012). In a recent Delphi study of 14 international experts (including clinicians or professionals working directly with fathers, trainers, researchers and those who have published in peer-reviewed articles about 'fathers'), paternal depression was described as low mood, negative thoughts, somatic issues (low hunger, weight loss, sleep issues), along with 'masked male depression' symptoms such as irritability, withdrawal/ isolation and increases in substance use (or other dopaminergic types of activities like gambling and cheating) during pregnancy or within a year or so postpartum (Freitas et al., 2016). As men have different communication and coping styles compared to women, they may be less likely to access health services, more reluctant to discuss their mental health symptoms or concerns due to wanting to put their partner's needs first, or even present with different mental health symptoms and needs (Morgan et al., 1997; Meighan et al., 1999; Robertson et al., 2015; Darwin et al., 2017).

In their integrative review of paternal depression, Edward et al. (2015) highlighted that men and women differed in their knowledge and beliefs about the symptoms and causes of postnatal depression. Many women perceived postnatal depression to be associated with the biological rather than psychosocial cause and therefore unique to women's pregnancy and birth. This could potentially exclude men in the consideration for depression by their partners, in the perinatal period (Edward et al., 2015).

Research into men's presentation of mental health problems in the perinatal period remains limited and little is known about their needs and challenges (Rominov et al., 2016; Darwin et al., 2017). Using the same methods for assessing and managing men's and women's mental health needs may not be appropriate, given that there may be gender differences in the presentation of mental health problems. The different signs and symptoms displayed by men highlight some of the complexities around the mental health needs of fathers during their transition to fatherhood and emphasise the need for better understanding of these by health professionals.

2.6 Impact of Fathers' Mental Health Problems

As discussed in Chapter 1, the impact of mental health problems can be wide ranging, affecting fathers themselves, their partners, their children, and during the perinatal period can affect their own working and short-term memory loss (Pio De Almeida et al., 2012), and negatively impact on their ability to perform tasks in their workplace (Melrose, 2010). It can also have a profound impact on their relationships, both with their partner and their child (Amato, 2001; Fletcher et al., 2015).

A number of studies have reported declining marital satisfaction, reduced partner support and increased conflict between parents to be associated with the challenges and adjustments during the transition to parenthood (Belsky and Kelly, 1994; Cowan and Cowan, 2000; Shapiro et al., 2000; Huston and Holmes, 2004; Howard and Brooks-Gunn, 2009). Decline in relationship satisfaction and conflict is linked to a reduction in positive couple communication after having a baby (Cowan and Cowan, 2000; Pinquart and Teubert, 2010), with the use of destructive problem solving being the highest in couples during the first three months after the birth (Houts et al., 2008). Belsky and Kelly (1994) reported mothers' relationship satisfaction with their partner declining most sharply during the first year after birth, while according to Cowan

and Cowan (2003) this was more likely to be reported among fathers' in the second year following their child's birth.

In a longitudinal study of 218 couples in the United States, Doss et al. (2009) examined the effect of the birth of the first child on relationship functioning over the course of the couple's first eight years of marriage. They reported that parents showed sudden deterioration following birth on observed and self-reported measures of positive and negative aspects of relationship functioning, compared with pre-birth levels and trajectories. Couples who did not have children showed a more gradual deterioration in relationship functioning during the first 8 years of marriage without the sudden changes seen in parents, suggesting that the results seen in the parent sample may be due to childbirth (Doss et al., 2009).

Similarly, Lawrence et al. (2008), reported greater declines in marital satisfaction in first-time parents compared to nonparents. This was also a longitudinal study of 156 married couples (104 parent couples and 52 non-parent couples) over a four year period. In addition, Lawrence et al. (2008) found that couples with planned pregnancies had higher pre-pregnancy satisfaction scores, and the planning slowed the fathers' (but not mothers') postpartum declines in relationship satisfaction, therefore suggesting that pre-pregnancy marital satisfaction may act as a protective factor for relationship decline during the transition to parenthood for fathers (Lawrence et al., 2008).

If relationships between mothers and fathers following the birth of their child are fraught, postnatal depression may be more likely to develop in both parents in the first year of birth (Davé et al., 2010). Depression in parents may result from or be stimulated by a declining couple relationship (Gottman et al., 2010), making it important to focus on interventions which strengthen couple relationships and reduce parents' feelings of unworthiness when promoting mental health and wellbeing during the transition to parenthood (Parfitt and Ayers, 2014).

Mental health problems in fathers can also contribute to negative interactions between the father and child, resulting in negative impacts on the child. Ramchandani et al. (2005), in the ALSPAC cohort study discussed earlier, which controlled for mothers' depression and for fathers' education levels, found that the presence of symptoms of severe self-reported postnatal depression in fathers (assessed using the EPDS) was associated with emotional and behavioural problems in their children at around three years of age, particularly in boys. In a later study, Ramchandani et al. (2008) reported an increased risk for psychiatric, behavioural, and conduct disorders in children aged 7 years, if their fathers had been depressed in the antenatal and postnatal periods. A more recent study using the ALSPAC data of over 3000 families in Bristol identified a link between postnatal depression in men, as assessed using the EPDS and an increased risk of depression in their teenage daughters at age 18 (assessed using International Statistical Classification of Diseases and Related Health Problems, Tenth Revision codes) (Gutierrez-Galve et al., 2018).

An association between father-child conflict and behaviour problems in children has also been reported (Phares, 1999; Flouri, 2005). Several studies have suggested a link between poor cognitive, behavioural, social, and emotional development in children, and a negative father-child relationship (Paulson et al., 2006; Wanless et al., 2008; Paulson et al., 2009; Fletcher et al., 2011; Sethna, et al., 2012). Ramchandani et al. (2013) identified that disengaged interactions of fathers with their infants at three months postpartum predicted behavioural problems in children. Fathers suffering from depression may not have the capacity to engage and be involved in their child's education, and low interest by fathers in children's education has a stronger negative impact on their achievement (Blanden, 2006). Davis et al. (2011) in a cross-sectional study of interview data from secondary analysis of 1746 fathers of one-year old children reported that depressed fathers were less likely to spend time reading to their children and more likely to smack them compared to non-depressed fathers, thus negatively effecting the father-child relationship. This study was carried out as part of the Fragile Families and Child Wellbeing Study, an ongoing,

nationally representative study in the United States following a cohort of children born between 1998 and 2000, and their parents.

Paternal depression may not just affect fathers' own levels of interaction with their children but may also interfere with the interactions between the child and their mother (Bradley and Slade, 2011). In a study of the effects of maternal and paternal depression on parenting behaviours from data on 5089 two-parent families, Paulson et al. (2006) reported an association between depression in both mothers and fathers with lower levels of positive enrichment activity with the child (reading, singing songs, and telling stories). Children with two depressed parents therefore are likely to be at a higher risk of poor developmental outcomes (Brennan et al., 2002). Paulson and Bazemore (2010) suggest that prevention and intervention for parental mental health in the perinatal period should focus more on the couple and family, rather than the individual.

Mental health problems in fathers can impact negatively on society. While the actual cost of paternal perinatal mental health problems is currently unknown, it is likely to be considerable given that maternal perinatal mental health problems have been estimated to carry a total economic and social long-term cost to society of about £8.1 billion for each one-year cohort of births in the UK (Bauer et al., 2014).

2.7 Interventions to Support First-Time Fathers' Mental Health and Wellbeing

A systematic review of interventions for the prevention or treatment of depression in fathers identified four studies, all focussing on treatment rather than prevention, with findings inconclusive due to wide study heterogeneity (Wee et al., 2013). This review highlighted the need for randomised controlled trials to identify effective mental health interventions for men in the postnatal period, particularly preventative interventions (Wee et al., 2013). Another

systematic review of intervention programmes to prevent or treat paternal mental illness in the perinatal period included eleven studies - five of which described psychosocial programmes (emphasising skills, knowledge, emotional well-being, and social well-being related to parenting), three focused on the effects of massage techniques (partner massage and infant massage), and three which used couple-based sessions (focused on the couple relationship and co-parenting) (Rominov et al., 2016). Eight studies were randomised controlled trials; however, six trials provided inadequate information on randomisation processes, meaning that risk of bias cannot be ruled out. The review authors reported significant intervention effects for a variety of fathers' mental health outcomes (including stress, depression, anxiety, anger levels and self-esteem) for two of the psychosocial approaches (Li et al., 2009; Tohotoa et al., 2012), and three that employed massage techniques (Latifses et al., 2005; Field et al., 2008; Cheng et al., 2011). There were no significant changes reported in paternal mental health following couple-based interventions. Although study limitations include poor reporting of study designs, variation in outcome measures used, and limited statistical analyses; the findings relating to couple-based interventions have interesting implications especially as increased emphases are now being placed on focusing on couple relationships and family interventions (Davis and Day, 2010; Paulson and Bazemore, 2010; Parfitt and Ayers, 2014).

A systematic review of evidence on parenting interventions which included men as parents or co-parents showed that insufficient attention was paid to reporting fathers' participation and impacts on child or family outcomes (Panter-Brick et al., 2014).

A rapid review to update the evidence of the Healthy Child Programme in England included systematic review level evidence published from 2008 to 2014 (PHE, 2015). It recognised the need to support fathers during the transition to parenthood and identified a lack of interventions designed specifically to support fathers, and the need for further evaluations of parenting interventions that actively engaged fathers. No reference was made specifically to interventions

aimed at improving fathers' mental health and wellbeing during the perinatal period.

The need to identify the most effective methods for supporting fathers remains (Barlow et al., 2008). Face-to-face behavioural interventions may be useful as discussed earlier in this chapter (Weiss et al., 2016), and high levels of psychological wellbeing could 'protect' against paternal mental health problems (Keyes et al, 2010; Wood and Joseph, 2010; Lamers et al., 2015; Weiss et al., 2016). This however needs further exploration.

2.8 Policy Context and Engagement with Fathers

In Supporting Families (Home Office, 1998), the then New Labour Government recognised that fathers have a crucial role to play in their children's upbringing. This message continues to be reflected in ongoing UK directives, recommendations and guidance. The national Healthy Child programme (DH, 2009; PHE, 2015) placed a major emphasis on parenting support, specifically concentrating on supporting strong couple relationships, engaging with fathers, and supporting the transition to parenthood for first-time mothers and fathers. In the UK there have also been changes in legislation, with the introduction of two weeks paid paternity leave in 2003 and the right for fathers to share parental leave or request 'flexible working' in 2015. While these changes are positive, in reality they are often not reflected in practice (Featherstone, 2009; Miller, 2011).

Historically child health has been perceived as the woman's domain and therefore services delivering these tend to be more women and child centred. There is also little known about effective interventions by professionals to support fathers' mental health and wellbeing. Health professionals' failure to engage with fathers is clearly an important reason for the lack of evidence on first-time fathers' mental health and wellbeing (Roberts et al., 2006).

As described earlier, fathers feel marginalised and unacknowledged by health professionals during the perinatal period, and report a lack of appropriate information on pregnancy, birth, child care, and balancing work and family responsibilities (Backstrom and Hertfelt Wahn, 2009; Williams et al., 2011; Dheensa et al., 2013; Palsson et al., 2017). In a recent qualitative study on 15 first-time fathers, Palsson et al. (2017) highlighted that while fathers desired antenatal strategies to deal with the changes brought about by new fatherhood, they lacked active guidance from health professionals to access reliable information. Fathers were also not acknowledged as equal parents, by health professionals (Palsson et al., 2017).

UK health visitors' practice may not always involve fathers (Williams, 1999), their role perceived by fathers as a service provided 'by women, for women' (Williams et al., 2013). A Department of Health for England funded literature review on service users' views suggested that some fathers welcomed the opportunity to express their feelings and emotions about fatherhood when asked by a healthcare professional (Greening, 2006), but did not always have the opportunity to do this spontaneously (Salway et al., 2009).

Fathers whose partners had postnatal depression reported barriers such as not knowing where to look for appropriate resources and the difficulty in reaching out for support, including social supports and referrals to health care professionals (Letourneau et al., 2011). In a study of 66 first-time expectant fathers, Castle et al. (2008) reported social support to be a protective factor for fathers, as fathers reporting higher levels of perceived social support throughout the pregnancy reported significantly lower levels of depression and distress at six weeks post-delivery, as assessed using the Hospital Anxiety and Depression Scale (HADS) (Zigmond and Snaith, 1983), Well-being Questionnaire (WBQ) (Bradley and Lewis, 1990) the EPDS (Cox et al., 1987) .

Health professionals' limited experience of working with fathers, and their inability to assess fathers' mental health and wellbeing to identify problems, have been highlighted (Massoudi, 2013; Hammarlund et al., 2015). In a recent study of UK health visitors, several anxieties were identified among those

participating, relating to the lack of support they were able to provide to fathers (Whitelock, 2016). Reasons were reported to include a lack of training on working with fathers, a lack of confidence to work with fathers, fears for own safety, and a lack of policies to screen fathers for any mental health problems. Similar themes were highlighted in a small qualitative, interpretative phenomenological analysis (IPA) study, where student health visitors (n=3) considered paternal mental health was not addressed in their training and that they were inadequately prepared to support fathers in practice (Oldfield and Carr, 2017).

Having a workforce that is primarily female could also act as a barrier to engaging fathers (Page et al., 2008). The UK midwifery workforce which is 99% female and the health visiting workforce 99.6% female (DH, 2012b). However, recommendations from a large literature review by the Movember Foundation (a leading UK charity aimed at improving men's health, to include mental health and suicide prevention) suggested that staff characteristics, skills and qualities such as being non-judgemental, male positive and empathic to men's needs are far more important than the sex of the staff (Robertson et al., 2015).

In a qualitative study of parental perspectives and involvement in health visiting services, good communication skills and personal attributes of the health visitor were noted as important factors to parents, including taking time to listen to parents (Brook and Salmon, 2015). To work successfully with fathers, practitioners have to consider addressing fathers needs as men, as well as fathers (like the way in which a family-focused approach is used with women) and not just as child carers (Ghate et al., 2000).

Men's perinatal mental health has not been given the same level of priority as women's in the UK. Screening tools such as the EPDS, which is commonly used by health visitors in the UK, has been validated for use with men in the antenatal and postnatal period as described earlier (Cox et al, 1996; Matthey et al, 2001) but NICE guidance (2014, 2018) does not currently include fathers in the recommended routine assessment and management of perinatal mental health.

2.9 An Overview of Health Visiting in England

In the UK, health visitors who are specialist community public health nurses, provide a service designed to offer proactive support to families particularly in the perinatal period. Health visitors are trained nurses with additional professional qualifications, and typically work with families with children under the age of five years. The role of the health visitor has gone through many changes since its conception in the mid-19th century, where initially 'respectable working women' were recruited to visit the homes of 'the poorer classes of the population', to teach in a range of different areas including hygiene, child welfare, mental health and social support (McCleary, 1933; While, 1987). These tasks however still resonate with the health visitor role today, which involves elements of nursing, education and social work (Baldwin, 2012). Experts in the field argue that it is the combination of a range of different tasks that make health visiting a unique profession (Cowley, 2002; Malone et al, 2003), which also includes health promotion and the prevention of ill health.

Health visitors were identified as the professionals to lead on the delivery of the national Healthy Child Programme (DH, 2009), which includes a focus on the six high impact areas and delivering the five mandated contacts as outlined in Figure: 1 (PHE, 2018b).

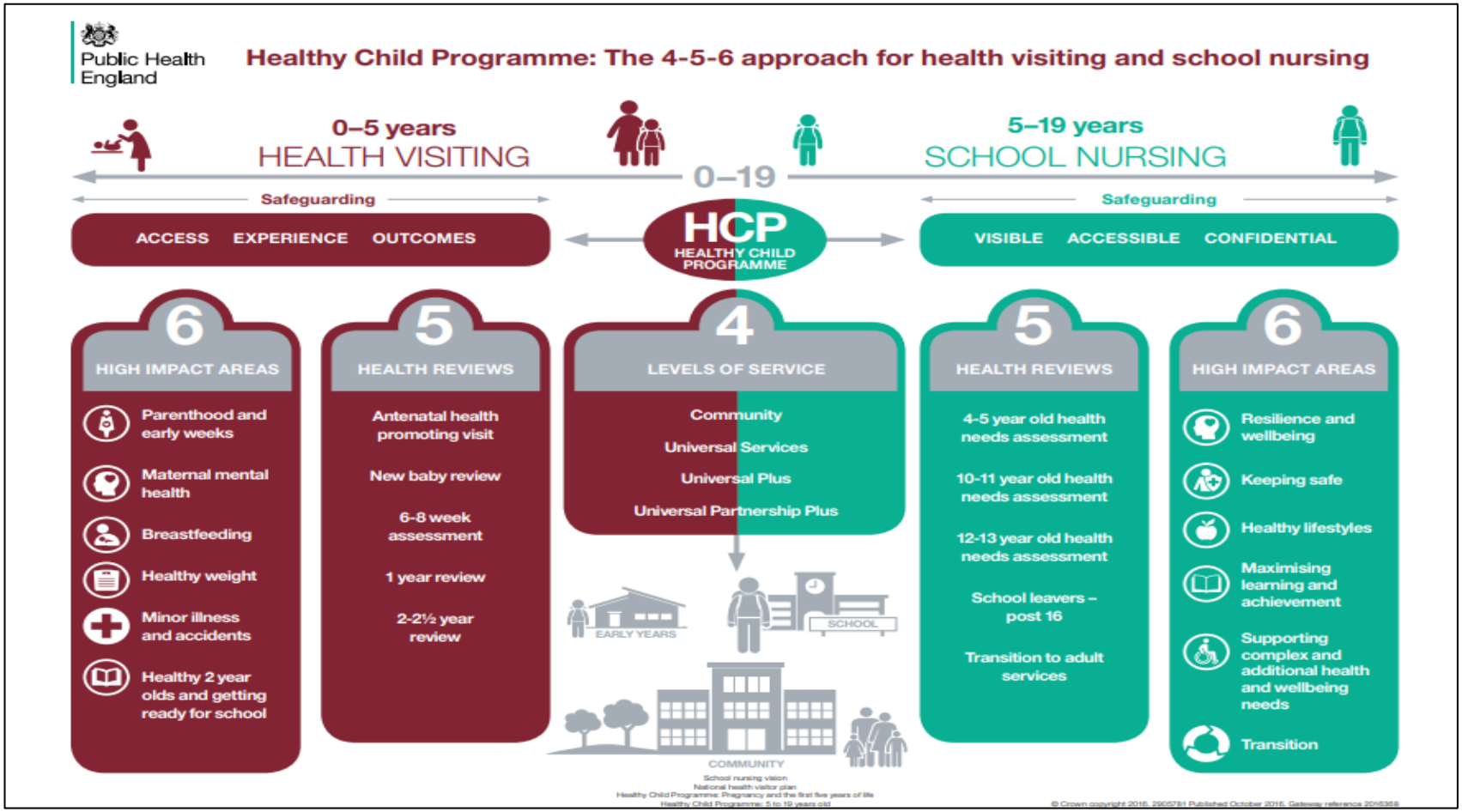


Figure 1: Healthy Child Programme: The 4-5-6 model for health visiting and school nursing (PHE, 2018b)

The first high impact area, 'parenthood and the early week', included 'fathers', however the second only referred to 'maternal' mental health. In a recent report, the Institute of Health Visiting (IHV) proposed the extension of the high impact areas from six to 15 (Appendix - 1), to ensure the full scope of the health visiting contribution is recognised and maximised (IHV, 2019b). These were based on evidence driven recommendations from the updated 'Health for all Children (fifth edition)' (Edmond, 2019), and included 'transition to parenthood', 'perinatal mental health (mothers, fathers and partners)' and 'healthy couple relationships' (IHV, 2019b), areas that are all significant to fathers' mental health and wellbeing during their transition to parenthood. According to IHV (2019b) "*Health visitors play an important role within local integrated perinatal mental health pathways; through their universal reach and holistic family-centred approach, health visitors are ideally placed to support mothers', fathers' and partners' mental health and in turn, empower parents to provide the very best foundation for good mental health across the life-course for their children. Health visitors can provide anticipatory guidance, identify risks and signs of mental health problems, manage mild to moderate perinatal mental illness and refer on to more specialist care according to the level of need"* (p-27).

As discussed in Chapter 1, through the five mandated contacts, health visitors are expected to carry out comprehensive and holistic assessments of the expectant/ new mother's and father's needs, and provide individualised care to support their health and wellbeing (physical and mental) and parenting practices. The exclusion of fathers' mental health in the 4-5-6 model (PHE, 2018a) and lack of national guidance around how best to support fathers has resulted in some ambiguity in this area as highlighted earlier in this chapter.

A decline in the health visiting workforce has occurred over the last few years. As part of the national 'Health Visitor Implementation plan, 4300 new health visitors were recruited between 2010 and 2015 under the then coalition government (Hancock, 2019). This was in response to the national shortage of health visitors at the time, which was also highlighted in the Lord Laming's review of child protection (2009). In 2015, the responsibility for health visiting was transferred from the NHS to local government for the first time since 1974

(LGA, 2017). This meant that while many health visitors are still employed by the NHS, the service they provide is commissioned by the local authority. The number of health visitors in England steadily decreased following this transfer, with numbers reverting to pre-Implementation Plan figures (IHV, 2019b). A 31.8% reduction in health visitors in England's NHS has been reported, from 10,309 FTE health visitors in October 2015 to 7,026 FTE in June 2019 (NHS Digital, 2019).

An IHV's State of Health Visiting Survey carried out in 2015 to explore demands placed on health visitors, reported that one in four health visitors could not provide every family with a postnatal mental health (PMH) assessment at 6-8 weeks, and three in four could not complete this assessment at 3-4 months as recommended by the government (IHV, 2015). As the workforce numbers have declined significantly since then, demands placed on health visitors have increased and many are now unable to offer the minimum five contacts to every family in England. The IHV survey was repeated in November 2019, completed by 1209 health visitors in the UK, which showed that only 34% were able to offer the mandated antenatal contact to all families and 22% to a few priority families (IHV, 2020). This survey however did not specify whether fathers were included in these contacts. The figures for completing the 6-8 week review were reported to be higher, with 73% of health visitors in the UK (86.5% in England) reporting to complete it (IHV, 2020), however it is not clear if this review only included the assessment of the baby or also the assessment of parental mental health and wellbeing.

In July 2019, IHV released a Position Statement, stating that as a result of the cuts to health visitor posts, "*families will no longer receive a universal health visiting service as set out in Public Health England's Commissioning Guidance – instead, health visitors will work predominantly with the most vulnerable families and will only see families for 3 of the 5 mandated reviews*" (IHV, 2019a, p-2). The latest report (IHV, 2020) also highlighted the increasing caseloads of health visitors, with 43% reporting to be responsible for 400 to over 1000 children, a rise from 27% in 2015 (IHV, 2020). This therefore increases the risk of health visitors simply 'ticking the box but missing the point' due to the

pressure placed on them by commissioners for delivering these contacts and brings into question the quality of these contacts (IHV, 2020).

The IHV has called on the government to increase the number of mandatory contacts with families from five to eight, to address “key priorities” (IHV, 2019b, IHV, 2020). It also highlights the urgent need for a “workforce strategy” to be implemented for health visiting, to address the growing staff shortages since 2015. In order to achieve better health outcomes for children and families, a more integrated and seamless system is necessary, for which IHV is calling for greater collaborative working of health visiting services with GPs and the NHS (IHV, 2020).

2.10 Chapter Summary

This chapter has provided an overview of the literature relating to men’s mental health and wellbeing during their transition to fatherhood. While there are clear distinctions between the terms ‘mental health’ and ‘mental wellbeing’, in the literature they are often used inter-changeably. A number of studies have considered the prevalence rates of, and risk factors for, paternal perinatal mental health problems but most focussed on anxiety and depression. There is limited evidence of other perinatal mental health issues affecting men such as bipolar and psychosis.

The signs and symptoms of mental health problems which may persist in men when they become fathers mainly relate to those based on general population studies, with a paucity of research focussing specifically on paternal perinatal mental health. Only two qualitative studies specifically explored fathers’ own perinatal mental health views and experiences. Most studies focussed on biological fathers, with the needs of non-biological resident fathers remain unknown.

The impact of paternal mental health problems on the wellbeing of fathers themselves, their partners, their children and on wider society is apparent. More

research is needed to identify effective interventions to support fathers during their transition to parenthood. There is a current push by the UK government towards providing father-inclusive child health and perinatal health care services, however no clear guidance for healthcare professionals around how this should be done. There is currently no requirement to routinely assess men's mental health during the perinatal period, even though a number of validated tools are available for use with fathers.

Barriers to assessing first-time fathers' mental health and wellbeing, and provision of adequate support persists. Further research is necessary to bridge the identified gaps, which the study presented within this thesis aimed to do. Better understanding of the experiences of first-time fathers, whether biological or non-biological, during their transition to fatherhood and identifying what information and support they consider could help their mental health and wellbeing, would enable the development of appropriate and timely healthcare professional-led interventions likely to be more acceptable to fathers.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Chapter 2 outlined some of the complexities associated with men's mental health in the perinatal period. This chapter explores the numerous components of the intervention selected for this study and its theoretical framework.

The first part of this chapter presents the study methodology, detailing why it was selected, and why it was a complex intervention. The latter part of this chapter describes the overall methods, patient and public involvement, and issues relating to research governance.

3.2 The Medical Research Council Framework for Complex Interventions

The Medical Research Council (MRC) framework for complex interventions (initially published in 2000, updated in 2008, and a new update expected) provides guidance to researchers on the process for developing and evaluating complex interventions. The first guidance published in 2000 addressed some of the unique challenges that arose from evaluating interventions with several interacting components, and it suggested some strategies to address issues with respect to developing, identifying, documenting, and reproducing the intervention (Campbell et al., 2000). According to Campbell et al. (2000), problems often arose in the reporting of outcomes of evaluation of complex interventions due to researchers not fully defining or developing their intervention in the first place. A phased approach to the development and evaluation of complex interventions was proposed, to support researchers to clearly identify which phase they were addressing in the research process when developing an intervention to be tested in a definitive randomised controlled trial (RCT) (Figure: 2).

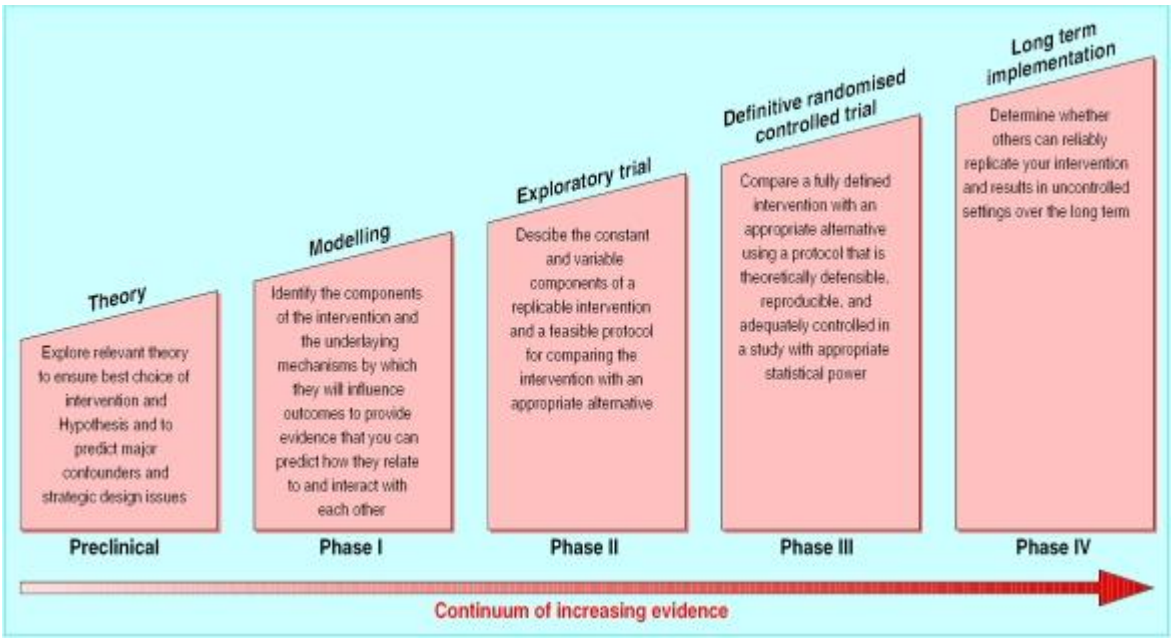


Figure 2: Original MRC Framework for the development of complex interventions (Campbell et al., 2000)

The preclinical or theoretical phase is intended to consider evidence from the literature on how an intervention may work and identify the active ingredients that may bring about the desired change. This phase is crucial in identifying the relevant theory to ensure that the most appropriate intervention is chosen. The modelling phase involves defining the different components of the intervention to provide a better understanding of the components and their inter-relationships. This phase could involve, for example, gathering perspectives on the planned intervention from interviews, focus groups, surveys, or case studies to help define relevant components. The exploratory phase involves testing the feasibility of delivering the intervention and acceptability to providers and patients (Campbell et al., 2000). Based on the results of the exploratory phase, a definitive RCT and process evaluation can be undertaken in the following phase. The purpose of the final phase (long term implementation) is to examine the implementation of the intervention into practice, paying particular attention to the rate of uptake, the stability of the intervention, any broadening of subject groups, and the possible existence of adverse effects.

This 2000 version of the MRC framework, although reported to be highly influential and useful in practice (Campbell et al., 2000), was criticised for being too linear (Craig et al., 2008). This framework mainly focused on randomised controlled trials and did not make any reference to process evaluation (Campbell et al., 2000). Other limitations included the lack of evidence for many of the recommendations; the limited guidance on how to approach developmental and implementation phase studies; a lack of guidance on how to tackle highly complex or non-health sector interventions; and the lack of attention to the social, political or geographical context in which interventions take place (Hawe et al., 2004a; Campbell et al., 2007; Craig et al., 2008). The need to incorporate qualitative and quantitative research methods within the evaluation of complex interventions was highlighted by many authors (Hawe et al., 2004b; Oakley et al., 2006). As a result the second guidance for developing and evaluating complex interventions was published in 2008, which aimed to address the limitations of the earlier version by "*providing a more flexible, less linear model of the process, giving due weight to the development and implementation phases, as well as to evaluation; and giving examples of successful approaches to the development and evaluation of a variety of complex interventions, using a range of methods from clinical trials to natural experiments*" (Craig et al., 2008 p-6).

The 2008 MRC framework included four phases: development, feasibility and piloting, evaluation, and implementation (Figure: 3). This framework, although presented in a cyclical sequence, suggests an iterative, stepped, structured and mixed-method approach in application, rather than a linear approach.

The development phase of this framework involves identifying the evidence base for the intervention, ideally by carrying out a systematic review, and then developing the theoretical rationale. Having a relevant theory for the intervention is more likely to result in the intervention being effective rather than using an approach that is purely experimental or pragmatic (Albarracin et al., 2005). Modelling a complex intervention prior to a full-scale evaluation can

provide important information about the design of both the intervention and the evaluation. Weaknesses identified during this phase could lead to suggestions for refinement, which could be undertaken prior to a full-scale evaluation (Craig et al., 2008).

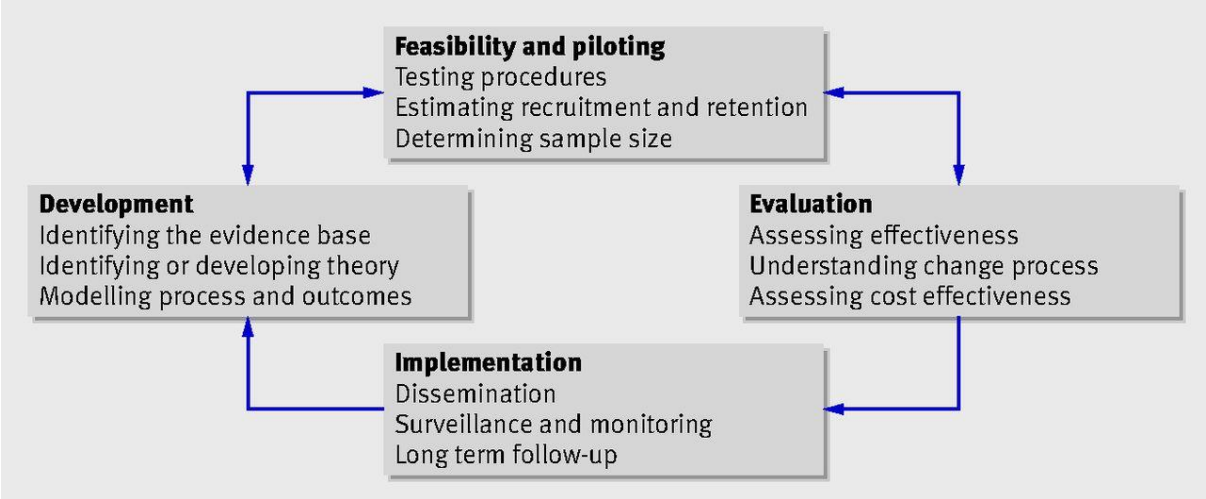


Figure 3: Second version of the MRC Framework for the development of complex interventions (Craig et al., 2008)

The feasibility and piloting stage include testing procedures for their acceptability, estimating rates of recruitment and retention of subjects, and determining the appropriate sample sizes. There is evidence to suggest that this stage is often not given adequate attention (Eldridge et al., 2004), resulting in problems relating to acceptability, compliance, and recruitment and retention (Prescott et al., 1999; Rowland et al., 2002; Scheel et al., 2003; Armstrong et al., 2006; McDonald et al., 2006; Bower et al., 2007). Feasibility and pilot testing are recommended to overcome some of these issues, using mixed methods to enable better understanding of things like barriers to participation, protocol fidelity and response rates. According to Moore et al. (2015), "*at this stage, process evaluation can have a vital role in understanding the feasibility of the intervention and optimising its design and evaluation*" (p-2). Once the study design has been refined, based on the results of the feasibility and pilot testing, a full-scale evaluation may be undertaken. This may include testing effectiveness, understanding the change process and assessing cost-

effectiveness. The final stage of this process is the implementation phase, where the ultimate goal is to embed the intervention into routine practice through dissemination, monitoring and long term follow up.

Although the updated framework recognised the value of process evaluation, it did not provide guidance on how to conduct this. Therefore, a case was made by the MRC Population Health Science Research Network in 2010, for process evaluation guidance for researchers, funders, and reviewers (Moore et al., 2014). A framework was published in 2015 (Moore et al., 2015), based on the 2008 MRC framework process evaluation themes (Craig et al., 2008, Figure: 4). Key recommendations were developed (Moore et al., 2015) for each step of the process: planning, design and conduct, analysis, and reporting (Appendix - 2).

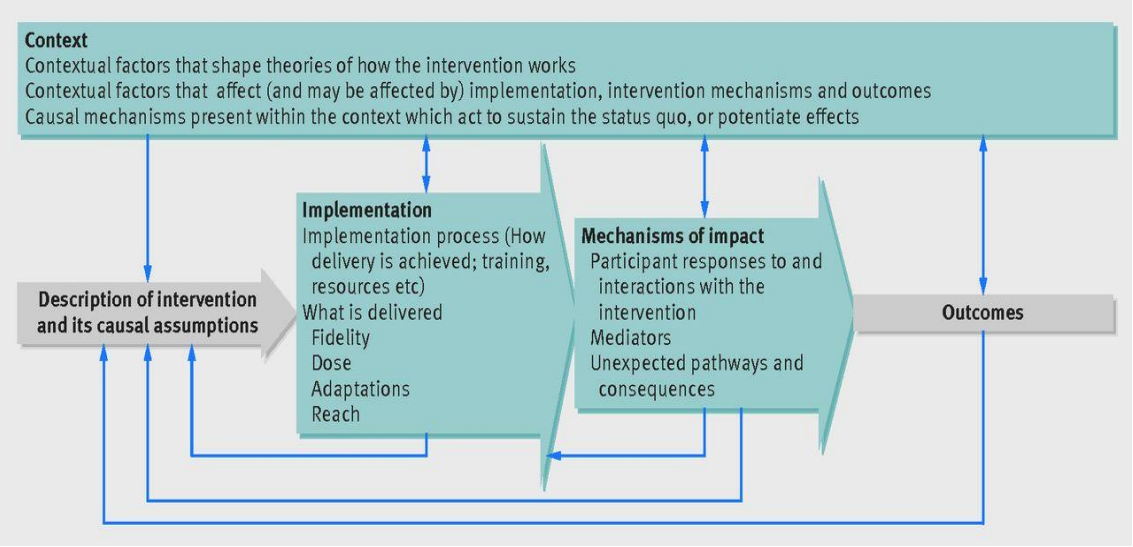


Figure 4: Process evaluation framework: key functions and relations among them (Moore et al., 2015)

The 2008 MRC framework however has been criticised for its contradictory ontology, which some have considered "*fails to articulate the relationship between the positivism of randomised controlled trials with the relativism of qualitative approaches*" (Blackwood et al., 2010, p-511). These authors argued that the epistemological assumptions embedded in the RCT methodology is that

of ‘cause and effect’, a positivist notion based on the Humean (Hume, 1969) philosophical perspective (Blackwood et al., 2010). By including a mixed-methods approach to the framework (Craig et al., 2008, Moore et al., 2015) qualitative research was introduced, which originates from the ontological assumption of relativism, a completely different research paradigm (Blackwood et al., 2010). While many researchers have argued that qualitative and quantitative research paradigms, including their associated methods, cannot and should not be mixed (Johnson and Onwuegbuzie, 2004), Blackwood et al. (2010) proposed the use of ‘realistic evaluation’, as advanced by Pawson and Tilley (1997) based on the ontological perspective of critical realism, to explain the processes involved between the introduction of an intervention and the outcomes produced. Realistic evaluation involves understanding the social processes involved in implementing the intervention, as well as the characteristics of the intervention, to create a better understanding of the outcome. In other words:

Mechanism + Context = Outcome (Blackwood et al., 2010).

Reviewing the epistemological basis for a mixed-methods approach, Marks (2002) stated that for applied fields that are interested in both process and outcomes “*it is necessary to adopt a pragmatic framework that can enable integration of both qualitative evidence concerning subjective experience, values and meanings and quantitative evidence into practice that is fully evidence-based*” (p-23). The MRC framework does advise that wherever possible evidence should be combined from a variety of sources that do not share the same weaknesses (Craig et al., 2008). Therefore, in the debate of opposing paradigms, using realist strategies in combination with randomised controlled trials could provide the best option for evaluating complex health interventions (Blackwood et al., 2010).

In the past, reporting of complex interventions often did not contain enough detail about the research process, outcome and/ or the intervention, making replication and synthesis of evidence difficult (Glasziou et al., 2008). To address

this weakness, Craig et al. (2008) recommended comprehensive reporting at all stages of the research process, using reporting guidelines available from a single website for health research, the EQUATOR network website (https://www.equator-network.org/). The EQUATOR (Enhancing the QUAlity and Transparency Of health Research) Network is an international initiative that seeks to improve the reliability and value of published health research literature by promoting transparent and accurate reporting and wider use of robust reporting guidelines (Simera et al., 2010). However, most are designed to report RCTs (Boutron et al., 2008; Zwarenstein et al., 2008; Campbell et al., 2012; Mayo-Wilson et al., 2013) rather than reporting complex interventions and relationship between quantitative and qualitative components (Mohler et al., 2015).

The first Criteria for Reporting the Development and Evaluation of Complex Interventions (CReDECI) in healthcare was developed in 2012, which specifically focussed on reporting the process of development, piloting, and evaluation of complex interventions (Mohler et al., 2012). This reporting criteria is unique in that it does not specify a particular research design (Mohler et al., 2012). This is particularly important for reporting the process of development and evaluation of a complex intervention, as it requires the use of different study designs conducted subsequently or at the same time (Craig et al., 2008). The initial CReDECI consisted of 16 items designed around the first three stages described in the MRC framework (Craig et al., 2008): development, feasibility and piloting, and introduction of the intervention and evaluation (Mohler et al., 2012).

CReDECI was later revised in 2015 following the recommendations of the EQUATOR network, based on a formal consensus process (Mohler et al., 2010). CReDECI 2 list comprises 13 items (compared with 16 items in the original list) and covers all relevant methodological aspects that need to be reported during the research process of the development, piloting, and evaluation of a complex intervention (Mohler et al., 2015). According to

Armstrong and colleagues (2008), reporting should also include the assumptions, ideally in a logic model, about how the intervention works, and how these informed the selection of research questions and methods (Armstrong et al., 2008). A logic model was developed for the intervention (Promotional Guide System) evaluated in this study and is discussed further in Chapter 6 of this thesis.

Given the considerable advancement in the field of developing and evaluating complex interventions, MRC and NIHR jointly commissioned an update of the 2008 guidance, which was due to be published in late 2019 but had not been by the time this thesis was completed. The 2008 framework (Craig et al., 2008) was used as a guide for the current study, along with the 2015 framework for process evaluation (Moore et al., 2015). While for this thesis a complex intervention is being evaluated rather than developed, the MRC framework for developing and evaluating complex interventions (Craig et al., 2008) was chosen to provide a structured, yet flexible approach to reporting the different phases of the study. Although there are four phases to this framework, this study has been based around the development, and feasibility and piloting phases. The process evaluation has been undertaken using the MRC guidance 'process evaluation of complex interventions' (Moore et al., 2015) and reported using CReDECI 2 (Mohler et al., 2015), further discussed in Chapter 7.

3.3 Complex Interventions

According to the original MRC guidance (Campbell et al., 2000), complex interventions were described as interventions that had multiple components, however it has been argued that a multi-component intervention may not necessarily mean it is 'complex', rather it may be just mean that it is 'complicated'. Glouberman and Zimmerman (2002) describe the differences between 'complex' and 'complicated' by comparing the processes involved in sending a rocket to the moon to the ones involved with raising a child. Sending a rocket to the moon is 'complicated', as it requires great skill and numerous

interacting components, however it can be predictable, and a step-by-step process can be followed and replicated. Raising a child is ‘complex’, because its unpredictable nature and the steps taken will depend on the interactions between the parent and child, whose behaviours are likely to be influenced by other social and environmental factors.

Most public health interventions involving behaviour change are complex interventions (Michie et al., 2009; Moore et al, 2019), especially as they include different professions or organisational levels targeted by the intervention (context of the intervention) and/or a need to tailor the intervention for specific settings (flexibility of the intervention) (Craig et al., 2008). Hawe et al. (2009) argue that public health interventions should be viewed as ‘events’ within public systems rather than sets of decontextualized components. This will require taking account of the context within which the change needs to take place rather than just concentrating on the change in isolation. New guidance suggests that the role of context should be accounted for throughout the phases of the MRC framework, taking a whole system perspective (Craig et al., 2018).

3.4 The Promotional Guide System – a Complex Intervention

The Promotional Guide system developed by the Centre for Parent and Child Support (www.cpcs.org.uk) consists of Antenatal and Postnatal Guides, which are used with parents by trained health visitors to support their health and wellbeing; promote early fetal and infant development; and provide accurate, well-informed decisions about family needs, health behaviours and early intervention (Barlow and Day, 2016). An important component of the intervention is the interaction between the parent and the health visitor, which requires the health visitor to be trained in its use.

The promotional guides include questions based around the health, wellbeing and development of mother, father and baby through key development domains

such as couple relationship, family and social support, parent-infant care and interaction, and developmental tasks of early parenthood and infancy. The Antenatal Promotional Guide includes 11 topic cards and the Postnatal Guide has 10, linked to the key development domains, as outlined in Table 2.

Table 2: Key Developmental Domains, Antenatal and Postnatal Promotional Guide Topics

Key domains of early life development science	Antenatal promotional guide topics	Postnatal promotion guide topics
Health and wellbeing of mother, father/partner and baby		
Couple relationship Affection, intimacy and warmth. Expectations and roles.	Topic 1: Your feelings about your pregnancy. Topic 2: Your family and friends.	Topic 1: Your labour, birth and delivery. Topic 2: Your emotional wellbeing.
Family and social support Practical and emotional. Social capital.	Topic 3: Changing family life and relationships. Topic 4: Looking after yourself and the baby.	Topic 3: Becoming a mum, dad and becoming parents. Topic 4: Your family and friends.
Parent-infant care, nurture and interaction Familiarity and interest. Intuitive and learnt parenting behaviour and emotional tone. Reflective function/mind-mindedness.	Topic 5: Your unborn baby. Topic 6: Your labour and your baby's birth. Topic 7: Becoming a mum, dad and becoming parents. Topic 8: Caring for your baby.	Topic 5: Your baby's development. Topic 6: Caring for your baby. Topic 7: Baby cues, getting to know your baby. Topic 8: Your circumstances and community.
Development tasks of early parenthood and infancy Emotional bonds. Structure, routines, protection and care. Motor, emotional and social development. Communication, play and learning. Empathic responsiveness and self control.	Topic 9: Your circumstances and community. Topic 10: Recent and past life events. Topic 11: Priorities, plans and support.	Topic 9: Recent and past life events. Topic 10: Priorities, plans and support.

(Barlow and Day, 2016)

3.4.1 Theoretical Model

The Promotional Guide system is underpinned by the Family Partnership Model (FPM), which draws upon strands of different theories to include: personal construct, human ecology, self-efficacy and attachment theories (Figure: 5).

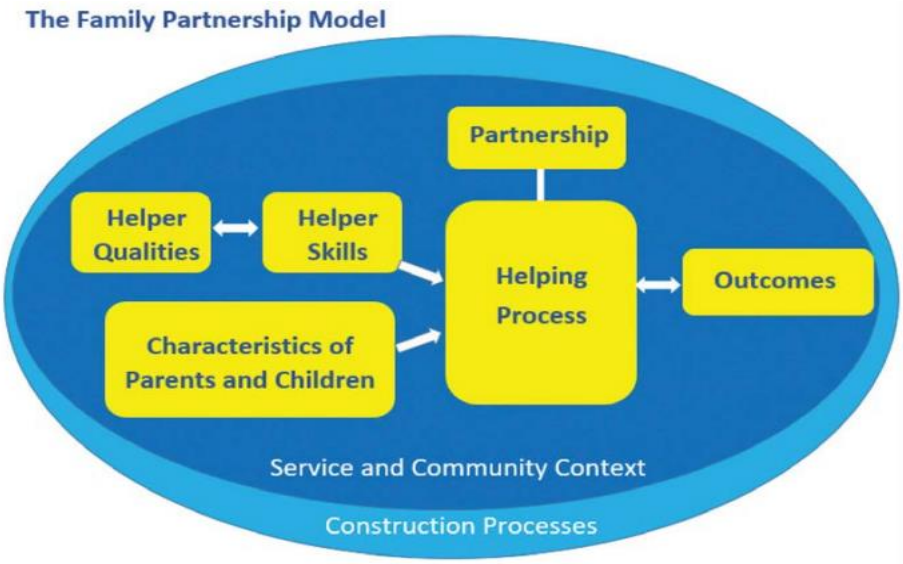


Figure 5: The Family Partnership Model (Davis and Day, 2010)

The personal construct theory suggests that everyone has a unique model of their own world, based on individual experiences and observations (Kelly, 1955). Processes of helping are therefore seen as engaging parents in a mutually trusting relationship, to provide them with an opportunity to explore their own constructs, enabling clarity and change (Puura et al., 2002). The FPM model facilitates this between parents and practitioners, using a partnership approach where they can explore, plan and formulate more helpful and meaningful constructs.

Human ecology theory holds the belief that parents' care of their babies is influenced by the larger social system/context in which they live, including relationships with other family members, friendship networks, neighbourhoods, communities, and cultures (Sontag and Bubolz, 1996). Change therefore in any part of the system affects the system as a whole. Bronfenbrenner's (1979) analysis of the systems such as the microsystem, mesosystem, exosystem, and macrosystem are an integral part of the human ecology theory. The FPM model acknowledges the impact of these different elements at various systems level, while helping parents negotiate and improve their environments.

Self-efficacy theory is rooted in the notion that persons are more likely to engage in a desirable behaviour if they believe the behaviour will produce a desired outcome and they can successfully adopt that behaviour to achieve that outcome (Bandura, 1977; 1986; 1997). Bandura (1995) describes self-efficacy as "*the beliefs in one's capabilities to organise and execute the courses of action required to manage prospective situations*" (p-2). The FPM model helps parents set realistic goals and bolsters parents' confidence in their ability to reach those goals, (e.g. avoiding or stopping risky behaviours, engaging in healthy behaviours, and/or coping with challenging situations).

Bowlby's attachment theory (1969) suggested that childhood development depended heavily on a child's ability to form a strong relationship with at least one primary caregiver, usually one of the parents. This theory, further developed to include attachment behaviour and adult relationships, proposes that children who receive sensitive and responsive parenting are more likely to grow up to become sensitive and responsive parents themselves (Ainsworth, 1967; Hazan and Shaver, 1994). The FPM promotes nurturing parenting through the Promotional Guides system.

The theoretical framework underlying the FPM emphasises the need for highly skilled professional communication. It also assumes that a respectful partnership between parent and potential helper is a powerful support in its own right and the means by which parents' self-esteem may be increased. Such a relationship is assumed to be the vehicle by which parents may be able to explore difficulties they face, to clarify their situation and to develop the most helpful and effective strategies for optimising the psychosocial development of their children. Such strategies include both the parents' ability to relate to and interact with their children appropriately, and also their ability to deal with other circumstances and problems, that might interfere with parenting.

While the FPM emphasises the need for partnership working and for the practitioners to have high levels of communication skills, it is also important to highlight some of the complexities relating to power hierarchies within the parent-practitioner relationship, which could impact on the way in which this model is used in practice. The issues relating to 'disciplinary power' between the health visitor and mother in the context of domestic violence has previously been reported, where practitioners used 'expert power' in their everyday work to provide support and health care to women and children (Peckover, 2002). Using the traditional 'expert' model of practice, based on a deficit view of families may ignore the strengths, capabilities and context-specific knowledge of parents, counter-productive to partnership working (Fowler et al., 2012). A balanced patient-practitioner relationship which involves a redistribution of power, therefore is key to shared decision-making (NICE, 2020). This however can be challenging for many practitioners as it is "counterintuitive" to traditional models of professional practice (Fowler et al, 2012) and requires a significant shift in their interaction with parents from a directive approach to one of inclusion and facilitation, active problem-solving and decision-making about their care (Davis et al., 2002; Bidmead and Davis, 2008). This dual role of 'inquirer' and 'facilitator' in the FPM would imply a tension that needs to be carefully negotiated, otherwise the potential for uneven power relationships may be present.

A number of preventative and early intervention services have been developed in the UK, Europe and Australia based on the FPM, including the Helping Families Programme; Health, Exercise and Nutrition for the Really Young (HENRY); and the South Australia Family Home Visiting programme and Maternal Early Childhood Sustained Home-visiting (MECSH). Evaluations of FPM have been reported in a number of studies, indicating positive benefits to the developmental progress of children (Davis and Rushton, 1991), parent-child interaction and the psychological functioning of parents, families and children (Davis and Rushton, 1991; Davis and Spurr, 1998). The FPM was also used in prevention studies, such as the Oxfordshire Home Visiting Study (Barlow et al., 2007), which was a multicentre randomised controlled trial involving 131 women

across two counties in the UK. The results suggest increased maternal sensitivity ($p<0.04$) and infant cooperativeness ($p<0.02$) at 12 months in the intervention group compared to the control group. The authors concluded that the intervention, which included an intense home visiting programme offered by health visitors using the FPM may have the potential to improve parenting and increase the identification of infants at risk of abuse and neglect in vulnerable families (Barlow et al., 2007).

According to Barlow and Day (2016):

"The promotional guide approach is consistent with the values and best practice of health visiting, as it incorporates the latest findings from developmental science into a manualised, evidence-based set of practitioner materials. It enables practitioners to work in a tailored, personalised and flexible way. They avoid a 'tick box' approach in favour of a partnership approach, focused on an accurate and constructive understanding of the strengths and needs of each baby and their family." (https://www.nursinginpractice.com/promoting-early-infant-development)

There are several studies that are based on FPM, testing various outcomes as discussed above, however the effectiveness of the current version of the Promotional Guide System has not been tested to date. Thus, it appears that the adoption of Promotional Guides into policy has been mainly influenced by the outcomes of the European Early Promotion Project (EEPP) (Puura et al, 2002) discussed in Chapter 1, and outcomes of other studies based on the underlying model (FPM) rather than the actual intervention (Promotional Guide system).

The Promotional Guide system is a parenting intervention with multiple components that are non-linear in nature. The effectiveness of the intervention is dependent on a number of unpredictable factors such as the: helper quality, helper skills, helper process, characteristics of parents and children, and

partnership between helper and parent. All these which are also likely to be influenced by the wider system and context – the family, community, services available and the wider social context. Consequently, the Promotional Guide system can be described as a complex intervention, that requires consideration of a whole systems approach.

Despite lack of evidence of benefit in a UK population, this intervention was selected for this study because it addresses issues which are relevant to the transition to fatherhood, including changes to couple relationships and preparation for parenthood. It has not been tested in relation to supporting fathers' mental health and wellbeing. Nevertheless, exploring the feasibility and acceptability of the Promotional Guides along with a nested process evaluation was considered a more efficient way of generating evidence to support first-time fathers' mental health and wellbeing rather than developing a new intervention.

Reporting about non-pharmacological interventions in the literature has often been criticised for not being described adequately (Abell et al., 2015; Davey et al., 2015; Grudniewicz et al., 2015). To address this issue, an international team of experts developed 'The Template for Intervention Description and Replication (TIDieR) checklist and guide (Hoffmann et al., 2014) to enable standardisation in the reporting of non-pharmacological interventions. Cotterill and colleagues (2018) used the TIDieR template for intervention description in six applied health research projects and identified four themes relating to the difficulties of using TIDieR in applied health research. Based on this, they made suggestions for four revisions to the original TIDieR as follows (Cotterill et al., 2018):

- 'Voice' – to convey who was involved in preparing the TIDieR template
- 'Stage of implementation' – to convey what stage the intervention has reached, using a continuum of implementation research suggested by the World Health Organisation.
- 'Modification' as a new column – to remind authors to describe modifications to any item in the checklist.

- ‘How well’ item to be extended – to encourage researchers to describe how contextual factors affected intervention delivery.

The TIDieR checklist was completed for the Promotional Guide system, in order to promote full and accurate description of the intervention within the thesis, taking into consideration the changes suggested by Cotterill and colleagues (2018), and is discussed further in Chapter 6 of this thesis.

3.5 Application of the MRC Framework to this Study

As discussed earlier in this chapter, the MRC framework (Craig et al., 2008) informed the structure and reporting of this study, as follows:

Intervention Development

This incorporated the first two study phases:

Study phase I: A systematic review of the qualitative evidence of first-time fathers' experiences of transition to fatherhood in relation to their mental health and wellbeing (Chapter – 4).

Study phase II*:* A qualitative exploratory study of first-time fathers’ experiences and perceived mental health and wellbeing needs during their transition to fatherhood (Chapter - 5).

As there has been no research undertaken on the Promotional Guides or similar interventions relating to first-time fathers’ mental health and wellbeing, the aim of the ‘Intervention Development’ stage was to identify first-time fathers’ experiences, and perceived mental health and wellbeing needs during their transition to fatherhood. This included identifying the type of support first-time fathers wanted and how they wanted it to be delivered.

The findings of *phase I and II* were mapped against the different components of the Promotional Guides, and a theory of change developed for this thesis. This

is further discussed in Chapter 6, where a logic model was created to diagrammatically depict the intended core components of the intervention and show how they may interact to produce change. Although this information was not used to develop a new intervention, this was an important step to inform the feasibility study and process evaluation to enable better understanding of how the intervention may improve first-time fathers' mental health and wellbeing. Findings from *Phase I and II* of the study also informed the questions asked within the feasibility study and guided the process evaluation (see Chapter 7).

Feasibility and piloting

This stage incorporated study *phase III*, a feasibility study of the use of the Promotional Guide system by first-time fathers to support their mental health and wellbeing, and the health professionals responsible for delivering the intervention. It included a nested process evaluation of the implementation (process, what is delivered, fidelity, dose, adaptations, reach); mechanisms of impact (participant responses to and interactions with the intervention, mediators, unexpected pathways and consequences); and context, as per the MRC guidance for process evaluation of complex interventions (Moore et al., 2015). The full feasibility study phase is presented in Chapter 7 of this thesis.

3.6 Methods

The methods used in each study phase reflected the most appropriate approach to meet the aims of each study phase. The aim of study *phase I* was to create a better understanding of what was already known about men's mental health and wellbeing during their transition to fatherhood. This required undertaking a systematic review and a qualitative approach was chosen as the aim was to 'understand' men's experiences.

Study *phase II* involved exploration of men's experiences and needs during their transition to fatherhood, while also focusing on the unknown factors from *phase I*. This therefore also required a qualitative approach to create a much

broader understanding of first-time fathers' experiences from their own perspective.

For study phase III a mixed-methods approach was chosen. 'Mixed methods' is a research approach whereby researchers collect and analyse both quantitative and qualitative data within the same study (Creswell and Plano Clark, 2011; Bowers et al., 2013). It has been defined as a "*type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration*" (Johnson et al., 2007, p-123).

The aim of this phase was to assess the feasibility of conducting a future large trial to determine the effectiveness of use of the Promotional Guide system in first-time fathers. It considered the feasibility and acceptability of the intervention, and piloted the outcome measures, which may be used in a future trial (Campbell et al., 2000). It also explored important parameters such as first-time fathers' willingness to participate and whether health visitors could recruit first-time fathers to implement the Promotional Guides. For this, quantitative data alone would not sufficiently answer the research question, and a 'mixed methods' approach was chosen to draw on the potential strengths of both qualitative and quantitative methods, allowing the exploration of diverse perspectives and uncover relationships that exist between the intricate layers of the multifaceted research question.

As discussed earlier in this chapter, mixed methods research has been criticised for integrating two very different philosophical paradigms. However, trials of complex interventions can only provide useful information if they explain processes and mechanisms (Blackwood et al., 2010). The aim of this study was to explore the feasibility of undertaking a future trial involving the Promotional Guide intervention and acceptability of the intervention by recipients (first-time fathers) and providers (health visitors). This cannot be achieved without

incorporating qualitative data from exploring the recipients' and providers' views, with quantitative data from recruitment rates and outcome measures of participants (fathers).

Rather than trying to solve the debate between the two research paradigms, Johnson and Onwuegbuzie (2004), suggested that mixed methods research should "*use a method and philosophy that attempt to fit together the insights provided by qualitative and quantitative research into a workable solution"* (p-16). They proposed a pragmatic method as a way to improve communication between researchers from different paradigms. Pragmatism holds the ontological belief that reality is what is useful, practical and works; epistemologically based in a paradigm that reality is known through using many tools of research that reflect both deductive evidence and inductive evidence; and therefore, can combine quantitative and qualitative approaches to data collection and analysis (Creswell, 2013). Research approaches should be mixed in ways that offer the best opportunities for answering research questions (Johnson and Onwuegbuzie, 2004). For study *phase III* a pragmatic approach of using mixed methods was considered to be the best option to meet the study aims.

3.7 Patient and Public Involvement (PPI)

Patient and public involvement (PPI) played a crucial part in this study from the onset. This was particularly important for the researcher, being female, coming from a profession that involved working predominantly with mothers and babies. Input from the PPI members meant that every aspect of the study was given consideration from first-time fathers' perspectives, therefore making it more acceptable to first-time fathers, while creatively adding to the success of the study.

Initially contact was made with a group of fathers through a local fathers' group in a Children's Centre, who influenced the focus of the study and research design. Fathers in this group were of varying ages and from diverse cultural and

ethnic backgrounds. Feedback from these fathers during the development of the study helped influence the research question, study design and data collection methods. The initial plan for this study was to explore postnatal depression in fathers, but discussions with this group of men highlighted the need to focus on mental health and wellbeing throughout the perinatal period, and not just poor mental health. This also fitted well with the researcher's clinical remit as a health visitor and public health nurse, and consequently shaped the focus of this study. Initially, there were also uncertainties about the study design for *Phase II* of this thesis. Fathers in this group felt interviews would be preferable to a focus group setting, which would enable men to talk more "openly and honestly" on a one-to-one basis rather than in a group setting. These views were taken into consideration when designing the data collection method for this phase of the study.

Once the study commenced, a PPI group of four first-time fathers was established to provide expert advice to all aspect of this project. They were recruited through advertisements in local Children's Centres, health centres and the use of social media platforms (Appendix - 3). The first meeting took place in July 2016, where an outline of the study was presented, along with the roles and expectation of the members (Appendix - 4). Throughout the course of this project the membership to the PPI group changed due to members moving out of the area and in some cases, because of work commitments. However, at least four first-time fathers were always involved and consulted at various stages, some face-to-face and some via email/telephone, to provide expert advice to this project on a range of aspects from the wording and presentation of research materials presented to fathers who participated, to the content of the study website, analysis of results and even the study logo. Initially two different logos were designed as shown in Figure: 6.

Logo: A	Logo: B
	

Figure 6: Initial designs for study logo

The researcher's own preference was logo A, similar to that of her female colleagues; however, when she consulted the PPI group, all four men preferred logo B. It is possible that logo A was favoured by women due to the 'nurturing' nature of the image, whereas logo B depicted more of a 'provider' image which men may have been able to relate to better. Ultimately logo B was chosen for the study based on the views of the first-time fathers in the PPI group.

The table below outlines the different stages at which PPI members were consulted and the topics discussed:

Table 3: Meetings/ consultations with PPI group members

Date	Discussion topics	Method of contact
22nd July 2016	• Background to the study • Role of PPI members • Expenses for attending meetings • Support for PPI members • Confidentiality • Project details & timelines • Future meetings: frequency, format, venue • Methods of future communication	Face-to-face
14th November 2016	• Development of participant information • Review of interview topic guide • Recruitment strategy for interviews • Where and how to advertise the study	Face-to-face
24th April 2017	• Logo for NEST • Website content – photos, text, language • Pilot questionnaire - how long did it take you to complete? - was it easy to follow?	Email, Social Media group & Telephone

	- were there any parts that were not clear or difficult to complete? - overall views and comments	
24th November 2017	• Feedback on systematic review • Interpretation of findings • Development of participant information and consent forms for feasibility study	Face-to-face
July - September 2018	• Discussion and feedback on interview findings/ themes • Dissemination plans • Plans for recruitment for feasibility study	Face-to-face & Telephone
November & December 2018	• Dissemination of published systematic review • Feedback on interpretation on qualitative study report	Email & Telephone
20th May 2019	• Study progress to date • Discussion and interpretation of findings of feasibility study • Next steps	Face-to-Face
September – November 2019	• Overall study findings • Dissemination plan	Face-to-face, Email, Social Media & Telephone

PPI involvement continued throughout the whole study. Following the systematic review, the group of fathers were consulted, and their views were taken into account when interpreting the findings. Findings of the systematic review were then used to develop the topic guide for the qualitative interviews in P*hase II* of the study, which was undertaken in discussion with the fathers in this group. All father-focussed participant resources for *Phase II* and *III* of the study were developed in collaboration with fathers from this group. Their input, particularly in relation to the language used, was extremely helpful in ensuring that the resources were 'father-friendly'. A photo of one member from this group (along with his child) has featured on the study website and posters. Fathers from this group have also played an important role in the dissemination of this study. They shared study advertisements with their peers during the recruitment process and promoted the study website resources and published papers through their social media platforms and parenting networks. Discussions with fathers in this group about the qualitative study findings (in *Phase II and III*) often challenged my own preconceptions and influenced my overall

interpretations. It could be said that having these men involved throughout the study had both a focussed and diffused impact (Dudley et al, 2015). A focussed impact refers to how first-time fathers in the PPI group influenced many aspects of the study, such as the study logo, study design, data collection instruments, recruitment strategy, development of the Theory of Change (discussed further in Chapter 6, section 6.4), to name a few. Diffused impact refers to the way in which these men influenced the way the researcher thought or felt about the study (Dudley et al, 2015). This included how I interpreted the qualitative findings, how I constantly reflected and questioned my assumptions and preconceptions relating to working with men.

In addition to the father advisors, health visitors and midwives provided feedback and advice throughout this project. The Institute of Health Visiting (IHV) holds biannual forums with Perinatal Mental Health Champions, which comprised mainly health visitors and midwives. This study was linked to the London Network forum, where regular updates were provided at each meeting and feedback received throughout the duration of this project. This helped to disseminate the information about the development and implementation of each study phase in a timely manner and share findings and recommendations for practice and future research.

Adrienne Burgess (Joint CEO and Head of Research) at the Fatherhood Institute, a leading charitable organisation for fathers and fatherhood in the UK, was a specialist advisor to the project. Based on the advice received from the Fatherhood Institute, the initial recruitment strategy was amended to include health visitors to recruit fathers for the qualitative interviews, which proved to be effective. The Fatherhood Institute was actively involved in promoting and disseminating the study.

Contributions from a range of different PPI groups provided good grounding to the study and helped to maintain focus on the most important issues. As well as benefiting the research, PPI involvement has the potential to benefit individuals.

Attree et al. (2010) found that community engagement with research teams can provide individual benefits such as confidence, higher self-esteem and a sense of personal achievement. The verbal feedback received from the fathers in the PPI group suggested that they have found the whole experience rewarding.

Fathers who provided active PPI advice to this study were provided compensation for their input in the form of gift vouchers, which was included in the NIHR grant, as per INVOLVE guidelines (NIHR, 2010).

3.8 Ethical Considerations

3.8.1 Informed Consent

All participation in the study was on voluntary basis and participants were informed that they could withdraw from the study at any stage. Participant information sheets were developed for each part of the study (Appendix – 5, 6, 7) and written consent was obtained from all participants who took part in the interviews (Appendix – 8, 9, 10, 11). This was only done after each participant was given a full explanation, the study information sheet and adequate time to consider their participation, which was at least 72 hours. Written consent was not obtained from those who participated in the online survey for the feasibility study because by completing the questionnaires it implied that they were consenting to take part. The interviews were transcribed with the principle of anonymity in mind and a Service Level Agreement was in place for the approved transcribing service used (Appendix – 12). Pseudonyms were given to all participants in the interview illustrations, to protect their identity.

3.8.2 Data Management

All data were kept confidential and any identifiable details altered when presented in the results. Participants' personal addresses, emails and telephone numbers were collected in order to communicate during the research process. These were stored electronically on secured encrypted and password

protected devices. Manual files included signed consent forms, which were uploaded and also securely stored electronically. Audio recordings were kept anonymous and the recordings of all interviews were deleted once analysed. Data were stored and analysed electronically on secured encrypted and password protected devices.

In 2018 the EU General Data Protection Regulation (GDPR) came into force, which was designed to modernise laws that protect the personal information of individuals (https://gdpr-info.eu/). The UK Health Research Authority also published detailed guidance about operational arrangements for health and social care research (https://www.hra.nhs.uk/planning-and-improving-research/policies-standards-legislation/data-protection-and-information-governance/gdpr-guidance/). Data for this study has been stored and used in accordance with these guidelines.

3.8.3. Potential Adverse Events

It was recognised that in describing the experiences of their transition to fatherhood, and the challenges these bring, it is possible that some fathers may have needed additional emotional support. In such cases, it was planned that details of local support services would be provided. It was also acknowledged that some men may have past or current anxiety or other mental health issues, social problems or relationship problems that could come to the fore during interviews. If individuals revealed such facts about their own health or relationships, then they would need to be referred to an appropriate health professional. These included issues relating to individual mental health, safeguarding children or couple relationships. In such cases, as a registered health visitor, the plan was for the researcher to make a referral to the individual's general practitioner. This would only take place if there were any significant risks of harm to an individual. Similarly, on completion of the online questionnaires, if any father scored more than 10 on the EPDS, or 10 or more on the GAD scale, the researcher would contact the father and offer appropriate

support. A protocol was devised to outline the process for referrals in these circumstances (Appendix – 13).

In total, the researcher had to take further action on 13 occasions, with 12 men as outlined below in Table 4.

Table 4: Adverse events and actions taken

Participant	Study Phase	Adverse event	Researcher Actions
First-time father	Qualitative Interview	Distressed due to financial strain and lack of support.	Signposted to services and support available.
First-time father	Online Questionnaire (Antenatal) (Did not complete PN questionnaire - moved out of area)	GAD score = 18	Contacted participant. Already accessing support from local CC. Discussed IAPT, GP and helpful resources on study website. Also emailed details of support services.
First-time father	Online Questionnaire (Antenatal)	Participant emailed researcher, requesting details for a counsellor.	Contacted participant and forwarded details of local IAPT and other support services. Also advised him to see his GP.
First-time father	Online Questionnaire (Antenatal) (Did not complete PN questionnaire – no response)	EPDS Score = 18	Contacted participant. Discussed IAPT, and other support services. Planned to see GP. Emailed details of local support services.
First-time father	Online Questionnaire (Postnatal)	EPDS Score = 11	Contacted participant. Discussed IAPT, GP and other support services. Also emailed details of support services available to him.
First-time father	Online Questionnaire (Antenatal) (Postnatal)	EPDS Score = 13 EPDS Score = 15	Contacted participant, who was already seeing a therapist. Requested for more support information via email, which was sent. Contact made, continues to receive psychological therapy.

First-time father	Online Questionnaire (Postnatal)	EPDS Score = 11	Contacted participant. Discussed IAPT, GP and other support services. Also emailed details of support services available to him.
First-time father	Online Questionnaire (Antenatal)	EDPS Score = 13	Contacted participant, who had already made an appointment to see his GP. Further details for support was emailed.
First-time father	Online Questionnaire (Postnatal)	EPDS Score = 19 GAD Score = 14	No phone number or GP details provided. Email sent with IAPT details, and national support websites, suggesting he contacts his GP or contacts me.
First-time father	Online Questionnaire (Postnatal)	EDPS Score = 14 GAD Score = 12	Contacted participant, already under treatment from GP and IAPT services.
First-time father	Online Questionnaire (Postnatal)	EDPS Score = 12	Contacted participant. Discussed IAPT, GP and other support services. Also emailed details of support services available to him.
First-time father	Online Questionnaire (Postnatal)	EPDS Score = 14	Contacted participant and forwarded details of local IAPT and other support services. Also advised him to see his GP.

3.9 Research Ethics Committee (REC) Approval

The study was conducted in compliance with the Research Governance Framework for Health and Social Care and Good Clinical Practice (GCP). Approval was obtained from the Health Research Authority (HRA) and given favourable opinion by London - Fulham Research Ethics Committee (IRAS no: 203629). Approval documents can be found in Appendix- 14 and 15.

3.9.1 REC Substantial Amendments

Following study commencement, changes were made to the feasibility study. In the initial proposal, the plan was to use three questionnaires:

- a baseline questionnaire in the antenatal period

- postnatal questionnaire - 1, three months after birth
- postnatal questionnaire – 2, six months after birth.

The amendments made included using two questionnaires, instead of three – the baseline questionnaire and postnatal questionnaire - 1. One reason for this was the time-constraints of this project. It was also thought that the third questionnaire was unlikely to add any additional value to the information being collected to answer the research question for the study.

This resulted in the need to revise the study protocol and participant information sheet to reflect the changes. In addition to this, an extra sentence was included in the participant information sheet about the content of the questionnaires, to better inform/prepare participants.

Changes were also made to the postnatal questionnaire, where two additional questions were included (question 4 in section 9, and question 4 in section 10). These questions provided pictures of the Promotional Guide topic cards used as part of the intervention and was thought to aid participants' ability to answer the question relating to the intervention (as they may be more likely to remember the pictures). These changes were not likely to have any significant impact on the participants and did not significantly alter the research design or methodology, therefore additional scientific critique was not necessary.

HRA and HCRW Approval for substantial amendments was received on 8th June 2018 (see Appendix – 16).

3.10 Study Management Meetings

Regular supervision meetings took place with the Chief Investigator Debra Bick at least once a month throughout the first three years of this study. Regular bimonthly meetings were scheduled during this period with all three academic supervisors (Debra Bick, Jane Sandall, Mary Malone), which took place when possible. In the final year of this study 1-2 monthly meetings were arranged with

all three supervisors and regular communication took place via emails, video conferencing and face-to-face meetings. The main aim of these meetings was to ensure that the study was progressing as planned and to provide advice and guidance on any aspects of the project as required.

The team also included Adrienne Burgess (Joint CEO and Head of Research at the Fatherhood Institute) and Crispin Day (Head of Centre for Parent and Child Support, South London and Maudsley NHS Foundation Trust), who acted as specialist advisors during the planning stages and were consulted as necessary during the study.

3.11 Study Website

www.newdadstudy.com

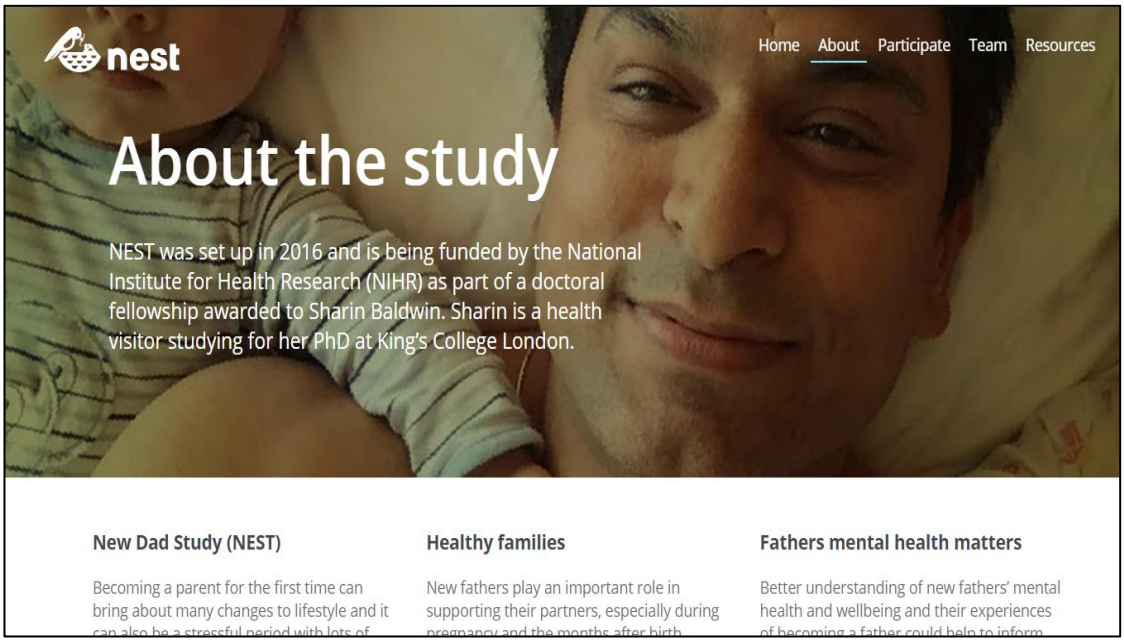
A study website was created to make all the information relating to the study more accessible to the public, potential study participants as well as practitioners, researchers and policy makers. The website contained several different pages as listed below:

Page 1 - Home page: NEST's Purpose at a Glance

- Why is fathers' mental health and wellbeing important?
- The challenges of fatherhood

Page 2 - About: About the study

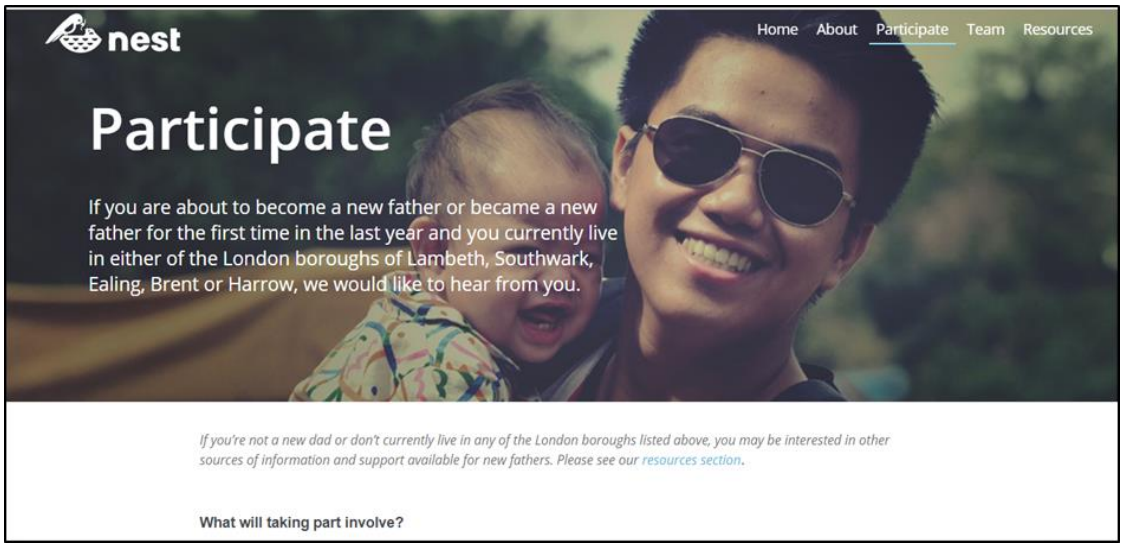
- New Dad Study (NEST)
- Healthy families
- Father's mental health matters



Page 3 – Participate: What will taking part involve?

- Study 1
- Study 2: For Dads & for Health Visitors

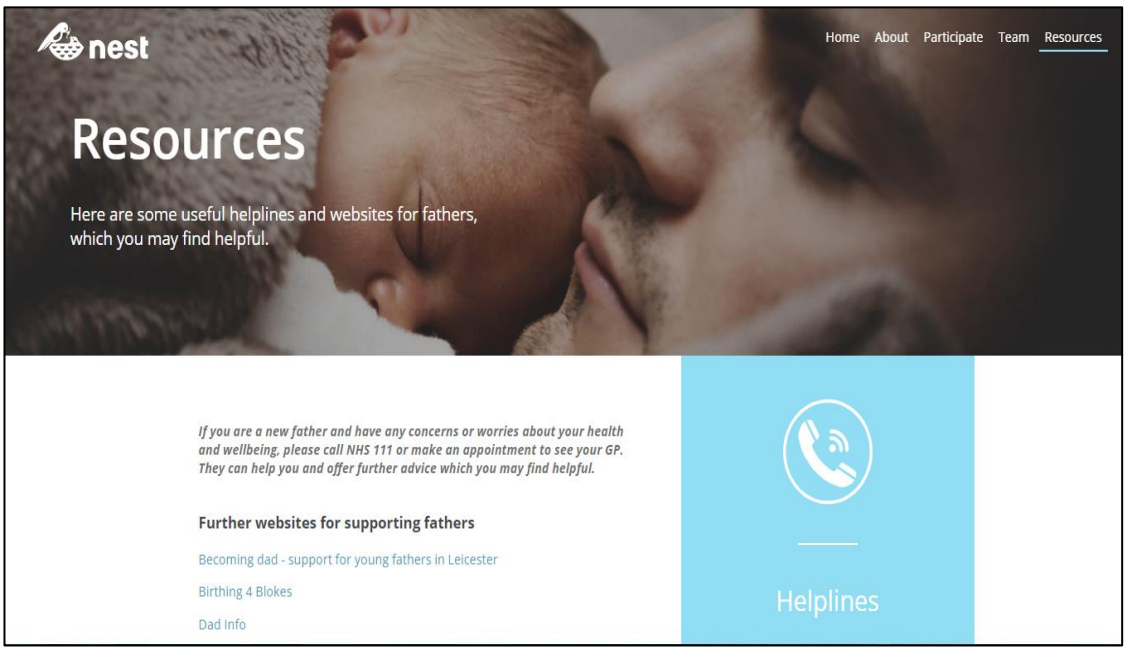
This page also included downloadable Participant Information Sheets for each Study.



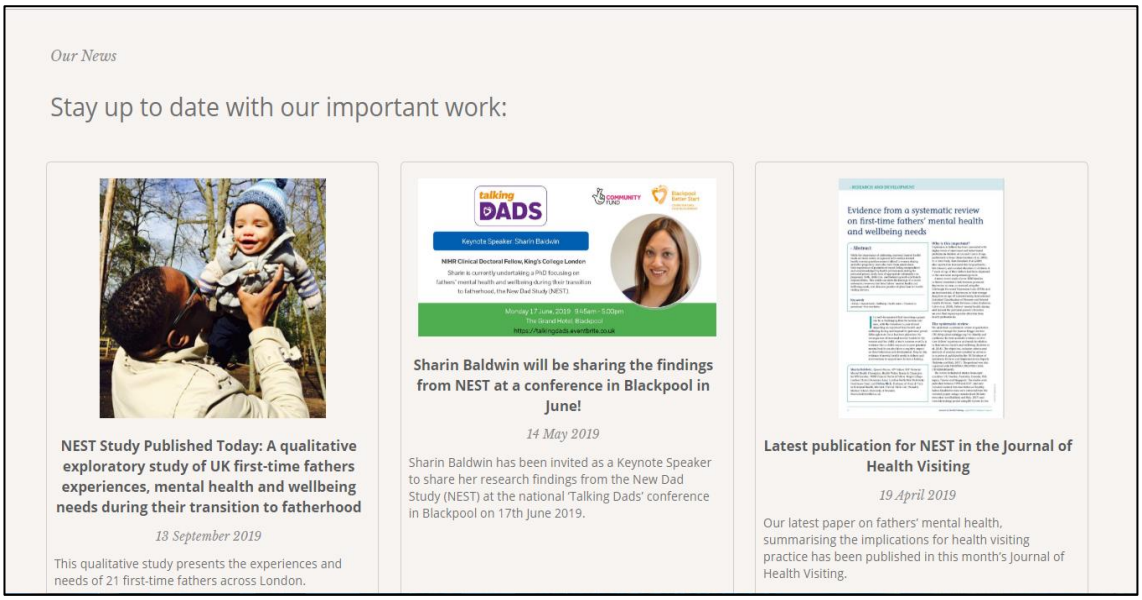
Page 4 – Team: Meet the team

- This included a short biography of all five team members and their contact details.

Page 5 – Resources: In this section useful helplines and website details were provided for fathers. It also provided information on what to do if anyone had any concerns or worries about their health and wellbeing.



The home page of this website contained a section titled **'Our News: Stay up to date with our important work'**, where regular blogs were added throughout the duration of this project to keep the audience up-to-date with its progress (as shown below).



The website was used to inform the public about the study, recruit participants and disseminate findings. Many health professionals also used the 'resources' section of this website to provide new fathers with information resources and support.

3.12 Study Rigour

Rigour in qualitative research refers to 'judging the quality' of the study. Morse et al. (2002) defined rigour as the strength of the research design and the appropriateness of the method to answer the questions. Lincoln and Guba (1985) suggest that rigour refers to the concept of 'trustworthiness', which is a central framework for evaluating a study's worth. They describe trustworthiness as establishing credibility, dependability, transferability and confirmability (Lincoln and Guba, 1985).

To demonstrate study rigour, the framework proposed by Lincoln and Guba (1985) was chosen and the strategies that applied to this study were systematically considered as discussed below.

Credibility

Credibility refers to the accurate and truthful depiction of a participant's lived experience. Lincoln and Guba (1985) suggested several techniques to address credibility including activities such as prolonged engagement, persistent observation, data collection triangulation, and researcher triangulation. Being a health visitor, working with parents in the perinatal period, the researcher was already familiar with the culture, social setting and the phenomena of interest. To enhance credibility of this study, the researcher ensured prolonged engagement with first-time fathers and health visitors through regular meetings with the PPI groups. Recruitment for *phase II and III* of the study also involved prolonged engagement in the study settings. To capture the participants' views accurately, during the interviews the researcher asked several distinct questions regarding the participant's individual experiences. Participants were encouraged to support their statements with examples, and follow-up questions were asked where relevant to provide further clarity. The researcher would not have been able to do this had she not had a good understanding of the phenomena of interest or the social, cultural and environmental factors relating to this.

Triangulation was also used which aims to enhance the process of qualitative research by using multiple approaches (Sim and Sharp, 1998). Methodological triangulation was used for study *phase III* by gathering quantitative data from online questionnaires and qualitative data through telephone interviews and observations, and triangulation of sources by collecting data from fathers as well as health visitors.

To enhance credibility of the data, following interviews, participants were provided an opportunity to check their transcripts, data analytic categories,

interpretations and conclusions. Feedback was obtained from participants to ensure that their views and experiences were accurately interpreted and represented, rather than being influenced by the researcher's own views and beliefs. Although all study data were initially analysed by the researcher, findings from each stage of the study were discussed with the supervisory team. The findings were only finalised once all four members of the team agreed. Regular meetings with the supervisory team and the clinical supervisor in practice ensured that the researcher had an opportunity to debrief and reflect on her own research practice.

Dependability

Dependability relates to the findings being consistent and repeatable. To achieve dependability, it is important to ensure the research process is logical, traceable, and clearly documented (Tobin and Begley, 2004). This allows the readers to examine the research process and make a judgement about the dependability of the research (Lincoln and Guba, 1985). According to Sandelowski (1986), a study and its findings are auditable when another researcher can clearly follow the decision trail. To ensure dependability, a clear audit trail was maintained, providing readers with evidence of the decisions and choices made by the researcher regarding theoretical and methodological issues throughout the study, giving clear rationale for all decisions made. The use of framework analysis also enabled a step-by-step process for data management, which is transparent and replicable.

Transferability

Transferability relates to findings being applicable to other contexts. This can be judged through the 'thick descriptions' provided by the researcher (Lincoln and Guba, 1985). The methods for this study have been described in detail from the outset in the study protocols. The reports provide sufficient information to enable readers to make informed decisions about whether the findings can be transferred to another setting or context.

Confirmability

Confirmability refers to the extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation, or interest and is established when credibility, transferability, and dependability are all achieved (Guba and Lincoln, 1989). Throughout the study, adequate detail was provided to demonstrate that the researcher's interpretations and findings were clearly derived from the data, and explanations given for how conclusions and interpretations were reached. Furthermore, markers such as the reasons for theoretical, methodological, and analytical choices made are presented, to enable readers to understand how and why decisions were made (Koch, 1994). Different triangulation techniques (methodological and data source) were applied in study *phase III*, to enhance confirmability of the study.

Reflexive journals were kept throughout to document the researcher's personal reflections of her values, interests, and insights. This was important in enabling the researcher to acknowledge any potential risk of personal bias, especially being a female researcher exploring men's experiences. Input from the PPI groups helped to keep this study grounded, minimising the risk of researcher bias. The strategies applied to this study to increase rigour has been summarised in Table 5.

Table 5: A summary of strategies applied to increase study rigour

Rigour Criteria	Purpose	Original Strategies	Strategies applied in this study to achieve rigour
Credibility	To establish confidence that the results (from the perspective of the participants) are true, credible and believable.	• Prolonged Engagement	• The interviewer spent six months in the study settings to recruit participants and gain an understand the culture, social setting, or phenomenon of interest. PPI group provided valuable insight.
		• Triangulation	• Methods triangulation (data gathered using both qualitative and quantitative methods) and triangulation of sources (from fathers and health visitors) was achieved in study phase III.
		• Member-checking	• Data, analytic categories, interpretations and conclusions were tested with all participants.
		• Peer debriefing	• Regular debriefing sessions took place with clinical and academic supervisors.
Dependability	To ensure that the findings are consistent and could be repeated	• Establishing an audit trail	• Using framework analysis enabled a clear data management audit trail.
		• Stepwise replication of the data	• The step-by-step process used for data management is transparent and replicable.

Transferability	To show that the findings have applicability in other contexts	• Rich description of the study methods. Enough detailed information so that others can make informed decisions about whether the findings can be transferred.	• The study methods were described in detail from the outset in the study protocols. The published papers also provide adequate details.
Confirmability	To demonstrate a degree of neutrality or the extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation, or interest. To extend the confidence that the results would be confirmed or corroborated by other researchers.	• Triangulation • Reflexivity	• Different triangulation techniques (methodological, data source) were applied. • Reflexive journals were kept throughout, and supervision meetings involved regular reflections.

3.13 Chapter Summary

In this chapter, an overview of the research design and methodology was presented and the rationale for choosing the MRC framework outlined. The Promotional Guide system is a complex intervention, based on the theoretical framework of the Family Partnership Model. The discussions within this chapter provide the background to the intervention which will be discussed further in Chapters 6 and 7 of this thesis. Patient and Public Involvement (PPI) played an important role in this study, which has been detailed. Key issues and processes relating to research governance, study management and study rigour have been discussed.

CHAPTER 4: PHASE 1 - A QUALITATIVE SYSTEMATIC REVIEW

4.1 Introduction

This chapter incorporates a published qualitative systematic review (Baldwin et al., 2018), which forms Paper 1 of this PhD thesis. In this chapter, additional description and justification for the methods utilised for the systematic review are included.

The review title was registered with the Joanna Briggs Institute (JBI), and the protocol published in the JBI Database of Systematic Reviews and Implementation Reports and PROSPERO (Appendix – 17). The findings of the systematic review informed the content of the qualitative interviews in *phase II* of the study and allowed exploration of aspects relating to men's transition to fatherhood.

4.2 Research Question

The review was undertaken to answer the first research question of this study:

What is already known about men's mental health and wellbeing during their transition to fatherhood?

This research question was broken down further for the review, to enable detailed evaluation as described on page 2124 of the paper. The review questions were developed using the PICo mnemonic for qualitative research (Table 6).

Table 6: Structuring the research questions using PICo

Population (P)	Expectant or first-time fathers of infants under 12 months of age.
Phenomena of interest (I)	First-time fathers' needs and experiences during their transition to fatherhood in relation their mental health and wellbeing.
Context (Co)	Between conception and up to 12 months postnatally.

4.3 Definition of Key Concepts Used Within the Systematic Review

- First-time fathers: men becoming a biological or non-biological parent for the first time.
- Resident fathers: those residing with their expectant partner, or their partner and child during their transition to fatherhood.
- Transition to fatherhood: the period from conception to one year after birth and applicable to biological and non-biological fathers.
- Mental health problems: could include any psychological difficulty or distress including depression, anxiety, and stress. These may be diagnosed by health professionals or self-reported by fathers.
- Mental wellbeing: this refers to positive mental health, covering both the hedonic (feeling good) and eudemonic components (functioning well) of psychological wellbeing.

4.4 Method

A qualitative approach was chosen for the systematic review as discussed in Chapter 3. The systematic review was conducted through JBI, with training and review support provided by The Centre for Evidence Based Healthcare at Nottingham University, a designated Centre of Excellence within the JBI global network.

4.5 Published Paper 1: First-time fathers' needs and experiences of transition to fatherhood in relation to their mental health and wellbeing: a qualitative systematic review

The published paper included supplementary information in Appendix I, such as details of all the databases searched and number of the papers identified on each database. Appendix II of the paper included an example of one of the searches undertaken on MEDLINE.

The full paper can also be accessed here: https://journals.lww.com/jbisrir/fulltext/2018/11000/mental_health_and_wellbeing_during_the_transition.10.aspx

Baldwin S., Malone, ME., Sandall, J. Bick, D. (2018) Mental health and wellbeing during the transition to fatherhood: a systematic review of first-time fathers' experiences. JBI Database of Systematic Reviews and Implementation Reports, 16 (11): 2118 - 2191.

OPEN

Mental health and wellbeing during the transition to fatherhood: a systematic review of first time fathers' experiences

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ABSTRACT

Objective: The aim of this systematic review was to identify and synthesize the best available evidence on first time fathers' experiences and needs in relation to their mental health and wellbeing during their transition to fatherhood.

Introduction: Men's mental health and wellbeing during their transition to fatherhood is an important public health issue that is currently under-researched from a qualitative perspective and poorly understood.

Inclusion criteria: Resident first time fathers (biological and non-biological) of healthy babies born with no identified terminal or long-term conditions were included. The phenomena of interest were their experiences and needs in relation to mental health and wellbeing during their transition to fatherhood, from commencement of pregnancy until one year after birth. Studies based on qualitative data, including, but not limited to, designs within phenomenology, grounded theory, ethnography and action research were included.

Methods: A three-step search strategy was used. The search strategy explored published and unpublished qualitative studies from 1960 to September 2017. All included studies were assessed by two independent reviewers and any disagreements were resolved by consensus or with a third reviewer. The recommended Joanna Briggs Institute (JBI) approach to critical appraisal, study selection, data extraction and data synthesis was used.

Results: Twenty-two studies met the eligibility criteria and were included in the review, which were then assessed to be of moderate to high quality (scores 5–10) based on the JBI Critical Appraisal Checklist for Qualitative Research. The studies were published between 1990 and 2017, and all used qualitative methodologies to accomplish the overall aim of investigating the experiences of expectant or new fathers. Nine studies were from the UK, three from Sweden, three from Australia, two from Canada, two from the USA, one from Japan, one from Taiwan and one from Singapore. The total number of first time fathers included in the studies was 351. One hundred and forty-four findings were extracted from the included studies. Of these, 142 supported findings were aggregated into 23 categories and seven synthesized findings: 1) New fatherhood identity, 2) Competing challenges of new fatherhood, 3) Negative feelings and fears, 4) Stress and coping, 5) Lack of support, 6) What new fathers want, and 7) Positive aspects of fatherhood.

Conclusions: Based on the synthesized findings, three main factors that affect first time fathers' mental health and wellbeing during their transition to fatherhood were identified: the formation of the fatherhood identity, competing challenges of the new fatherhood role and negative feelings and fears relating to it. The role restrictions and changes in lifestyle often resulted in feelings of stress, for which fathers used denial or escape activities, such as smoking, working longer hours or listening to music, as coping techniques. Fathers wanted more guidance and support around the preparation for fatherhood, and partner relationship changes. Barriers to accessing support included lack of tailored information resources and acknowledgment from health professionals. Better preparation for fatherhood, and support for couple relationships during the transition to parenthood could facilitate better experiences for new fathers, and contribute to better adjustments and mental wellbeing in new fathers.

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There is no conflict of interest in this project.

DOI: 10.11124/JBISRIR-2017-003773

Keywords First time father; expectant father; mental health; wellbeing; perinatal period
JBI Database System Rev Implement Rep 2018; 16(11):2118–2191.

ConQual Summary of Findings[1]

First time fathers' mental health and wellbeing experiences during the transition to fatherhood					
Bibliography: Baldwin S, Malone M, Sandall J, Bick D. Mental health and wellbeing during the transition to fatherhood: a systematic review of first time fathers' experiences. JBI Database System Rev Implement Rep 2018; 16(11): 2118–2191.					
Synthesized findings	Type of research	Dependability	Credibility	ConQual score	Comments
New fatherhood identity Becoming a father gave men a new identity, which made them feel like they were fulfilling their role as "men". They recognized that this new role came with changed priorities and responsibilities, which they welcomed; however, they often worried about being a "good father" and "getting it right"	Qualitative - High	Remains unchanged*	Downgraded one (-1)**	Moderate	* The majority of studies (7 out of 12) scored 5 out of 5 for the questions relating to appropriateness of the conduct of the research, therefore the dependability score remains unchanged. ** Downgraded one level due to mix of unequivocal (U) and credible (C) findings. U = 10, C = 13
Competing challenges of new fatherhood Men experienced a number of competing demands as they became fathers. They had to balance work demands with the time they were able to spend with their child. They also experienced a deterioration in their relationship with their partner, which included reduced satisfaction with their sexual relationship. Expectations of new fathers often did not meet reality, especially around breastfeeding and bonding. New fathers found breastfeeding to be a more difficult experience than anticipated, while many also	Qualitative - High	Remains unchanged*	Downgraded one (-1)**	Moderate	* The majority of studies (10 out of 14) scored 4-5 out of 5 for the questions relating to appropriateness of the conduct of the research, therefore the dependability score remains unchanged. ** Downgraded one level due to mix of mainly unequivocal (U) and credible (C) findings. U = 11, C = 13

struggled to bond with their babies in utero and in the early days following birth.					
Negative feelings and fears Expectant and new fathers experienced a range of fears and often did not know what to expect from the processes involved during the transition to fatherhood. This resulted in fathers feeling helpless, pushed out of the relationship and left them struggling to find a role. Men experienced specific fears relating to their partner's labor and birthing process. They often worried about the wellbeing of their partner and baby throughout the perinatal period.	Qualitative – High	Remains unchanged*	Downgraded one (-1)**	Moderate	* The majority of studies (9 out of 14) scored 4-5 out of 5 for the questions relating to appropriateness of the conduct of the research, therefore the dependability score remains unchanged. The remaining five studies scored 3 out of 5. ** Downgraded one level due to mix of mainly unequivocal (U) and credible (C) findings. U = 9, C = 17
Stress and coping New fathers' role restrictions and changes in lifestyle resulted in increased stress levels in new fathers, which manifested as tiredness, irritability and frustration. Fathers used denial or escape activities, such as smoking, working longer hours, or listening to music, as coping techniques.	Qualitative – High	Remains unchanged*	Downgraded one (-1)**	Moderate	* The majority of studies (5 out of 8) scored 5 out of 5 for the questions relating to appropriateness of the conduct of the research, therefore the dependability score remains unchanged. The remaining three studies scored 3 out of 5. ** Downgraded one level due to mix of mainly unequivocal (U) and credible (C) findings. U = 10, C = 5
Lack of support New fathers lacked support from their male work colleagues and peers. The main barriers to new fathers accessing or receiving adequate support were related to the lack of resources aimed specifically at men. Men were often not viewed or treated as equal partners and lacked acknowledgment or involvement by health professionals during their transition to fatherhood.	Qualitative – High	Remains unchanged*	Downgraded one (-1)**	Moderate	* The majority of studies (7 out of 11) scored 4-5 out of 5 for the questions relating to appropriateness of the conduct of the research, therefore the dependability score remains unchanged. Three studies scored 3 and one scored 1 out of 5. ** Downgraded one level due to mix of mainly unequivocal (U) and credible (C) findings.

					U = 13, C = 7
What new fathers want More guidance and support around the preparation for fatherhood, and relationship changes with their partner were identified as needs for first-time fathers. Having a variety of support mechanisms in place to include parenting groups involving others with similar experiences, father-friendly resources and father-inclusive services were useful strategies to support their mental health and wellbeing.	Qualitative – High	Remains unchanged*	Downgraded two (-2)**	Low	* The majority of studies (5 out of 6) scored 4-5 out of 5 for the questions relating to appropriateness of the conduct of the research, therefore the dependability score remains unchanged. The remaining one study scored 3 out of 5. ** Downgraded two levels due to all credible (C) findings only. C = 14
Positive aspects of fatherhood There were a number of positive aspects related to new fatherhood. Fathers who were involved with their child and bonded with them over time found the experience to be rewarding. Those who recognized the need for change, adjusted better to the new role, especially when they worked together with their partners.	Qualitative – High	Remains unchanged*	Downgraded one (-1)**	Moderate	* The majority of studies (7 out of 12) scored 4-5 out of 5 for the questions relating to appropriateness of the conduct of the research, therefore the dependability score remains unchanged. Four studies scored 3, and one scored 2 out of 5. ** Downgraded one level due to mix of mainly unequivocal (U) and credible (C) findings. U = 6, C = 14

Introduction

Fathers' mental health and wellbeing

The World Health Organization (WHO) defines mental health as "a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."[2(p.XIX)] The Royal Society for Public Health in the UK has recommended that it is important to actively promote positive mental wellbeing rather than just focusing on preventing and treating mental illness.[3] Men's mental health and wellbeing during their transition to fatherhood is an important public health issue that continues to be under-researched from a qualitative perspective and poorly understood.[4] Poor mental health in fathers can impact negatively on their children, their partner and wider society.

Ramchandani *et al.*[5] in a prospective cohort study, which controlled for mothers' depression and fathers' education levels, found that severe postnatal depression in fathers was associated with emotional and behavioral problems in their children at three years of age, particularly in boys. Moreover, children with two depressed parents were at higher

risk of poor development outcomes.[6] In a later study, Ramchandani *et al.*[7] also reported an increased risk for psychiatric, behavioral and conduct disorders in children aged seven years if their fathers had been depressed during the postnatal period. Several studies have suggested a link between poor cognitive, behavioral, social and emotional development in children, and a negative father-child relationship.[8-12] Poor mental health in fathers can also have an impact on the mother and the couple's relationship.[13] A study of first time parents' transition to parenthood highlighted the importance of focusing interventions on strengthening couple relationships and parents' feelings of unworthiness.[14]

Anxiety and depression are the two most common mental health problems experienced by fathers in the perinatal period.[4,15-24] A recent systematic review of 43 papers reported the prevalence rates of anxiety disorder in men to range between 4.1%–16% during their partners' pregnancy and 2.4%–18% during the postnatal period.[15] In another systematic review of 20 studies, the prevalence rates of antenatal and postnatal depression in fathers ranged from 1.2%–25.5%.[16] With the exception of one study, which assessed depression through symptoms in a qualitative interview, the remaining studies in this review used standardized self-report instruments with established reliability and validity.[16] A meta-analysis of 43 studies reported depression in 10.4% of fathers between the first trimester of their partner's pregnancy and one year postpartum, with the peak time being between three and six months after the birth, similar to findings for postnatal women.[4] Symptoms of anxiety and stress have also been reported alongside depression among men during and after their partner's pregnancy.[17-23] A literature review of 32 studies published between 1989–2008 on men's psychological transition to fatherhood, found pregnancy to be the most demanding period for the fathers' psychological reorganisation of self, and labour and birth to be the most emotional moments involving highly mixed feelings, ranging from helplessness and anxiety to pleasure and pride.[24] The postnatal period (defined in the review as up to one year following birth), however, was the most challenging time, due to fathers having to balance the various demands placed on them including personal and work related needs, their new role as a parent, emotional and relational needs of the family, and societal and economic pressures.[24] A key element highlighted in the review was the importance of the quality of each man's relationship with his partner across the antenatal, intrapartum and postnatal periods. The study included resident fathers, but not non-biological fathers (such as adoptive fathers), stepfathers or fathers in same sex relationships. Therefore, the experiences of non-biological fathers during their transition to fatherhood remains unknown.

A more recent systematic review of 18 studies which examined stress in fathers in the perinatal period indicated that fathers' stress levels increased from the antenatal period to the time of birth, with subsequent decrease in stress levels from birth to the later postnatal period,[23] in contrast to the above findings.[24] The main factors that contributed to stress in fathers in the perinatal period included negative feelings about the pregnancy, role restrictions related to becoming a father, fear of childbirth and feelings of incompetence about infant care.[23]

Current interventions and gaps in evidence

A Cochrane systematic review of group-based parenting programs for improving parental psychosocial health, found that only four of the 48 included studies reported separate outcome data from fathers.[25] While these showed a statistically significant short-term improvement in paternal stress following interventions that included cognitive and behavioral strategies, individual study results were inconclusive for any effect on depressive symptoms, confidence or partner satisfaction. The review authors concluded that this was "a serious omission given that fathers now play a significant role in childcare and research suggests that their psychosocial functioning is key to the wellbeing of children".[25(p.21)]

A review of interventions for prevention or treatment of depression in fathers identified four studies, all focusing on treatment rather than prevention, and reported inconclusive findings due to wide study heterogeneity.[26] The reviewers recommended the need for randomized controlled trials of effective mental health interventions for men in the postnatal period, particularly preventative interventions. Although this study was described as a systematic review, there was no evidence of the included studies being critically appraised, which raises concerns about the quality of the findings. Another systematic

review of intervention programs to prevent or treat paternal mental illness in the perinatal period included 11 studies: five of which described psychosocial programs (emphasising skills, knowledge, emotional wellbeing, and social wellbeing related to parenting), three focused on the effects of massage techniques (partner massage and infant massage), and three which used couple-based sessions (focused on the couple relationship and co-parenting).[27] Six of the eight randomized controlled trials included did not provide adequate information on randomisation processes and risk of bias could not be ruled out. The review authors reported significant intervention effects for a range of fathers' mental health outcomes (including stress, depression, anxiety, anger levels and self-esteem) for two trials of psychosocial approaches,[28,29] and three of massage techniques.[30-32] There were no significant changes reported in paternal mental health following couple-based interventions.

Health professionals' failure to engage with fathers during or around the time of birth could be a reason for the lack of evidence on first time fathers' mental health and wellbeing.[33] Fathers may feel marginalised and unacknowledged by health professionals during the perinatal period, and report a lack of appropriate information on pregnancy, birth, childcare, and balancing work and family responsibilities.[34-36] Research into the role of health visitors (public health nurses in the UK) found that they do not involve fathers in routine contacts[37] and were perceived by some fathers as a service provided "by women, for women".[38] A Department of Health for England funded literature review on service users' views suggested that some fathers welcomed the opportunity to express their feelings and emotions about fatherhood when asked by a healthcare professional,[39] but did not always have the opportunity to do this spontaneously.[40]

A systematic review of evidence on parenting interventions which included men as parents or co-parents showed that insufficient attention was paid to reporting fathers' participation and fathers' impacts on child or family outcomes.[41] A rapid review to update evidence for the Healthy Child Programme in England included systematic review level evidence published from 2008 to 2014.[42] It recognized the need to support fathers during the transition to parenthood, the lack of interventions designed specifically to support fathers and the need for further evaluations of parenting interventions that actively engaged fathers. The review made no specific reference to interventions aimed at improving fathers' mental health and wellbeing during the perinatal period. This highlights the crucial importance of assessing men's mental health in the perinatal period,[43] and identifying the best approaches to supporting fathers.[44]

While a number of studies relating to fathers' mental health have been discussed above, the majority of the studies were quantitative in nature, focusing on incidence and symptoms. Few studies to date have explored first time fathers' experiences and their perceived needs, or distinguished between biological and non-biological fathers, or if fathers were resident or non-resident in the family home. Better understanding of the experiences of first time fathers during their transition to fatherhood and identifying the level and content of information and support which could help their mental health and wellbeing, could inform the healthcare professional-led interventions acceptable to meet their needs. Barriers and facilitators to first time fathers accessing timely and appropriate support for their mental health and wellbeing needs could also be identified. This systematic review aimed to create a deeper knowledge of first time fathers' experiences, needs and help seeking behaviors relating to mental health and wellbeing during their transition to fatherhood and how fathers could be better supported during this time.

In this review, first time fathers refers to men becoming either a biological or non-biological parent for the first time, and resident fathers refers to those who resided with their expectant partner, or their partner and child during their transition to fatherhood. The transition to fatherhood was defined as the period from conception to one year after birth. Mental health problems included any psychological difficulty or distress including depression, anxiety and stress. These may have been diagnosed by a health professional or self-reported by fathers. Mental wellbeing included positive mental health, covering both the hedonic (feeling good) and eudemonic components (functioning well) of psychological wellbeing.

Initial searches of the *JBI Database of Systematic Reviews and Implementation Reports*, Cochrane Library, MEDLINE, PROSPERO and DARE

databases were conducted and although a small number of systematic reviews relating to this topic were identified and cited above, no qualitative systematic reviews were identified which answered the questions of this review.

The aim of this qualitative review was therefore to identify first time fathers' experiences and needs in relation to their mental health and wellbeing during their transition to fatherhood.

Review question/objective

The objective of this systematic review was to identify and synthesize the best available evidence on first time fathers' experiences and needs in relation to their mental health and wellbeing during their transition to fatherhood.

Specifically, it sought to evaluate:

- How mental health and wellbeing are experienced by first time fathers.
- The perceived needs of first time fathers around mental health.
- The ways in which mental health problems are experienced, manifested, recognized and acted upon by first time fathers.
- The contexts and strategies that are perceived by first time fathers to support mental wellbeing.
- The perceived barriers and facilitators to first time fathers accessing support for their mental health and wellbeing.

Inclusion criteria

Participants

Study participants included first time fathers of healthy babies born at full term with no identified terminal or long-term conditions. As this review focused on the mental health and wellbeing of fathers in general and not of those with specific additional needs, studies were excluded if they considered:

- Non-resident/absent fathers (those not residing with the partner/child during the period between conception to one year after birth).
- Fathers experiencing bereavement following neonatal death, stillbirth, pregnancy loss or sudden infant death.
- Fathers whose infants were born prematurely (≤37 weeks gestation).
- Fathers of a child with terminal/long term conditions.

Phenomena of interest

The phenomenon of interest for this review was first time fathers' experiences and needs during their transition to fatherhood in relation to their mental health and wellbeing.

Context

This review considered studies undertaken in high income countries as defined by the World Bank[45] (for example, countries which are members of the European Economic Community, the UK, the USA, Canada, Australia and New Zealand). The majority of these countries have similar healthcare systems (with a mix of public and privately funded universal service provision), and social and political systems, meaning that review findings are likely to be more transferable.

Types of studies

The review considered studies that focused on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography and action research. The review also considered qualitative data reported within quantitative surveys for inclusion, where open questions relating to the phenomena of interest had been asked.

Methods

The objectives, inclusion criteria and methods of analysis were specified in advance. The review was conducted according to the protocol, published in the *JBI Database of Systematic Reviews and Implementation Reports* (DOI: 10.11124/JBISRIR-2016-003031).[46] The protocol was also registered with PROSPERO (PROSPERO 2016:CRD42016052685).

Search strategy

The search strategy aimed to identify published and unpublished studies. A three-step search strategy was utilized. An initial limited search of MEDLINE (using Ovid) and CINAHL was undertaken followed by analysis of the text words contained in the title and abstract, and index terms used to describe the article. A second search using all identified keywords and index terms was then undertaken across all included databases. Thirdly, the reference list of all identified reports and articles were searched for additional studies.

Studies published in English were considered for inclusion as resources for translation were not available to the reviewers. Searches were conducted between January and September 2017 and computerized

searches for studies published from 1960 to the present were considered for inclusion, to reflect the shift in fathers' roles following the feminist movement.

The databases searched included: MEDLINE (Ovid), CINAHL, Embase, PsycINFO, Maternity and Infant Care, HMIC, British Nursing Index and Web of Science.

Searches were also carried out of the website of The Fatherhood Institute, the UK's leading charitable organisation for fathers and fatherhood. The Institute collates and publishes international research on fathers and impact of their role on children and mothers.

The search for unpublished studies such as theses and dissertations included: ProQuest Dissertations and Theses Global and WorldCat Dissertations and Theses (OCLC).

A full list of all databases searched and papers identified are presented in Appendix I, and an example of one of the searches undertaken (MEDLINE) is presented in Appendix II.

Study selection

The initial database searches and citation tracking was performed by the first author (SB). After pooling the retrieved titles, all duplicates were removed. Two reviewers (SB, DB) screened the titles independently and the final list of potential titles was created by compiling the lists of the two reviewers. The same process was repeated during the abstract screening where each reviewer read the abstracts independently and the selected abstracts were merged. Authors of the primary studies were contacted when the full text articles were not accessible. Discrepancies between the reviewers were resolved through comprehensive discussions to reach an agreement.

There were a number of studies where it was unclear if participants were first time or subsequent fathers, or residing with their partners or not. For such papers, where the authors' contact details were available, they were contacted for further clarification. Papers were excluded if it was not possible to obtain further clarification. Quantitative studies, review articles, meta-analyses or meta-syntheses, editorials, commentaries, letters, conference abstracts, studies with no available full-text and non-English studies were also excluded.

Assessment of methodological quality

Qualitative papers selected for retrieval were assessed by two independent reviewers (SB, DB) for methodological validity prior to inclusion in the review using the JBI Critical Appraisal Checklist for Qualitative Research as appended in the original protocol for this review.[46] This enabled the reviewers to engage with and better understand the methodological strengths and limitations of the selected primary studies.

Data extraction

Qualitative data were extracted from the included papers using the standardized JBI data extraction tool.[46] The data extracted included specific details on methodology, methods, phenomena of interest and findings relevant to the review question and specific objectives. During the data extraction process, a level of "credibility" was allocated to each finding based on the degree of support offered by each illustration associated with it. The first reviewer assigned levels of credibility to each of the findings using the three levels as described by the standardized JBI qualitative data extraction tool:

i) Unequivocal (U): findings accompanied by an illustration beyond reasonable doubt and therefore not open to challenge.
ii) Credible (C): findings accompanied by an illustration lacking clear association with it and therefore open to challenge.
iii) Unsupported (US): findings are not supported by the data.

These were then discussed amongst the three reviewers (SB, DB, MM) resulting in general consensus with allocation of these levels.

Data synthesis

Qualitative research findings were pooled using Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information (JBI SUMARI). Findings were identified through repeated reading of text, and selection of themes from the results section. Most of the findings were based on the themes identified by the study authors in their qualitative analysis. The three-step process of data synthesis involved:

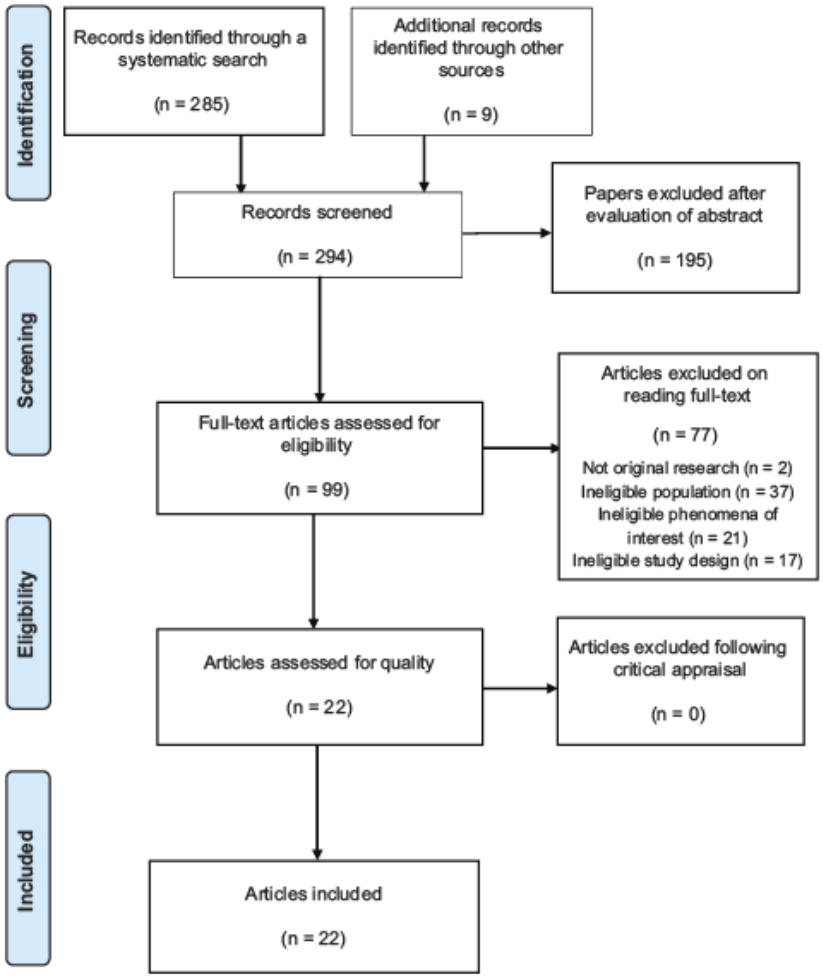
i) Extraction of all findings from all included papers with an accompanying illustration and establishing a level of credibility for each finding.
ii) Categorization of findings based on the similarity in meaning and concepts.
iii) Development of a comprehensive set of aggregated findings (of at least two categories) that could be used as a basis for evidence-based practice.

The categories, synthesized findings and accompanying descriptions were created using words and terminologies used by participants in the illustrations. These were discussed by the review team and revised until consensus was reached, prior to finalization. The reviewers also evaluated the synthesized findings with the ConQual[1] approach to establish a level of confidence in each synthesized finding (Summary of Findings).

Results

Study inclusion

The literature search initially returned 285 records through database searching and nine through hand-searching reference lists of these papers, resulting in 294 potentially relevant records. On further examination of the study titles and abstracts, 195 of these records were excluded for various reasons, including



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *Preferred Reporting Items for Systematic Reviews and Meta-Analyses*: The PRISMA Statement. PLoS Med 6(6): e1000097.

Figure 1: PRISMA flow diagram of search and study selection process

duplication, quantitative study designs, opinion papers, those not focusing on the phenomena of interest or not meeting the inclusion criteria. The remaining 99 articles were retrieved for a full review, following which, 77 were excluded based on the agreed inclusion and exclusion criteria (two were not original research, 37 had ineligible population, 21 had ineligible phenomena of interest and 17 had ineligible study design), leaving 22 articles to be examined for methodological quality (see Figure 1).

Methodological quality

The JBI Critical Appraisal Checklist for Qualitative Research[46] provided a framework for scoring the quality of qualitative studies by addressing different aspects of the research such as ethical considerations, potential bias, integrity of the methodology, and congruity between methods, results and conclusion. Nine of the 22 studies scored 10 out of 10 on the JBI Critical Appraisal Checklist for Qualitative Research.[50,53,54,57,61,63,64,65,68] Of the remaining studies, three scored nine,[49,59,60] five scored eight,[47,51,52,58,66] three scored seven,[55,56,67] one scored six[48] and one scored five.[62] In all included studies there was congruity between the research methodology, research questions/objectives, and the representation and analysis of data. The descriptions of the methodology and methods of the 22 studies were clearly reported which supports the transferability of the findings. The analyses used for the studies were adequately described and were in line with the aims of the studies. On reviewing the papers, however, it was apparent that many of the studies did not include statements locating the researchers' cultural or theoretical position, or the influence of the researcher on the research, and vice versa, making it difficult to determine the level of dependability of the study findings. This omission may have been due to the word restrictions set by journals. This was further discussed between the two reviewers (SB, DB) and for most of the papers any disagreements that arose between the two reviewers (SB, DB) were resolved through discussion. For two papers it was necessary to involve a third reviewer (MM). Following the third reviewer's (MM) appraisal of the papers and further discussion, consensus was reached among all three reviewers, which resulted in the final included papers presented in Table 1.

The 22 included papers were assessed to be of moderate to high quality as the score ranged between 5 and 10 on the JBI Critical Appraisal Checklist for Qualitative Research and therefore none were excluded for reasons of quality. Table 1 includes assessments of methodological quality and corresponding results.

Table 1: Critical appraisal of included studies

Included studies	Q1	Q2*	Q3*	Q4*	Q5	Q6*	Q7*	Q8	Q9	Q10
Barclay and Lupton[47]	Y	Y	Y	Y	Y	Y	N	Y	N	Y
Bozlan *et al.*[48]	Y	Y	Y	Y	Y	N	N	Y	N	U
Dallos and Nokes[49]	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Darwin *et al.*[50]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Deave and Johnson[51]	Y	Y	Y	Y	Y	N	N	Y	Y	Y
De Montigny and Lacharité[52]	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Dolan and Coe[53]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Finnbogadottir *et al.*[54]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Henderson and Brouse[55]	Y	Y	Y	Y	Y	N	N	Y	N	Y
Henwood and Procter[56]	Y	Y	Y	Y	Y	N	N	Y	U	Y
Ives[57]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Iwata[58]	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Jordan[59]	Y	Y	Y	Y	Y	Y	Y	Y	N	Y

Table 1. (*Continued*)

Included studies	Q1	Q2*	Q3*	Q4*	Q5	Q6*	Q7*	Q8	Q9	Q10
Kao and Long[60]	Y	Y	Y	Y	Y	Y	Y	Y	U	Y
Kowlessar *et al.*[61]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Machin[62]	U	Y	U	Y	Y	N	N	N	Y	Y
Olsson *et al.*[63]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Palsson *et al.*[64]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Poh *et al.*[65]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Rowe *et al.*[66]	Y	Y	Y	Y	Y	Y	N	Y	U	Y
Shirani and Henwood[67]	Y	Y	Y	Y	Y	N	U	Y	N	Y
Taniguchi *et al.*[68]	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

*ConQual dependability questions:
N, No; U, Unclear; Y, Yes.
Criteria for the critical appraisal of qualitative evidence:
Q1 = Is there congruity between the stated philosophical perspective and the research methodology?
Q2 = Is there congruity between the research methodology and the research question or objectives?
Q3 = Is there congruity between the research methodology and the methods used to collect data?
Q4 = Is there congruity between the research methodology and the representation and analysis of data?
Q5 = Is there congruity between the research methodology and the interpretation of results?
Q6 = Is there a statement locating the researcher culturally or theoretically?
Q7 = Is the influence of the researcher on the research, and vice-versa, addressed?
Q8 = Are participants, and their voices, adequately represented?
Q9 = Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?
Q10 = Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?

Characteristics of included studies

The 22 included studies were published between 1990 and 2017, and all used qualitative methodologies to investigate the experiences of expectant or new fathers. Nine studies were from the UK, three from Sweden, three from Australia, two from Canada, two from the USA, one from Japan, one from Taiwan and one from Singapore. The total number of first time fathers included in the studies was 351.

For the 22 included qualitative papers:

- Methods included: phenomenology (seven), unspecified qualitative (eight), grounded theory (two), discourse analysis (two), narrative (two) and critical incident technique (one).
- Twenty studies focused on first time fathers only, investigating their expectations, experiences, views, needs or involvement as new fathers. Of these, two studies included couples and two included both expectant and new fathers.
- The remaining two studies included both first time and subsequent fathers, one specifically investigating experiences of paternal perinatal mental health and the other sexual relationship following birth from the perspective of male partners.
- The data collection methods used were primarily semi-structured or in-depth interviews, carried out face-to-face or by telephone. In two studies, group discussions/focus groups were used in addition to the interviews.
- Data analysis methods were consistent with the qualitative methodology used in each individual study.

Full characteristics of the 22 included studies are presented in Appendix III.

Review findings

Each included paper was read by the two reviewers (SB, DB) and findings extracted. Each finding was accompanied by illustrations from the study to place them in context and assigned a level of credibility. For example, finding 3 was *Changing relationship with partner*. This was supported by an illustration from the study as follows:

"The first week was great, then after that things started to get worse. I never thought that Jenny and I would have fought so much".[47(p.1018)]

This illustration supported the authors' finding, and as risk of misinterpretation was minimal, it was considered to be "unequivocal".

In total, 144 findings were identified and the same process was followed. Fifty-nine (41%) findings were unequivocal (U), 83 (58%) credible (C), and only two

(1%) unsupported (US). As inclusion of unsupported findings is not recommended in JBI qualitative systematic reviews, the two unsupported findings were excluded from the next stages of the meta-synthesis. A full list of findings along with illustrations and levels of credibility are presented in Appendix IV. The 142 included findings were repeatedly read and reread to compare and identify similarities between them. Those found to be similar were aggregated into 23 categories as follows:

- Being a father, feeling more of a man
- Changed priorities, responsibility and expanded vision
- Being a good enough dad and getting it right
- Challenges of balancing work and the role of fatherhood
- Deterioration in couple relationship
- Changes to sexual relationship
- Breastfeeding: a difficult experience
- Struggles with bonding with the baby during pregnancy and the early days
- Not knowing what to expect and fear of the unknown
- Feelings of helplessness
- Pushed out of the relationship and struggling to find a role
- Fears relating to labor and birth
- Concerns about their partner's and baby's well-being
- Restrictions, frustrations and stresses of new fatherhood
- Coping mechanisms
- Societal expectations and lack of social/peer support
- Lack of tailored support or information resources for fathers
- Lack of acknowledgment and involvement by health professionals
- Need for guidance around preparing for fatherhood and relationship changes
- Preferred sources of information and support
- The rewards of bonding with their child
- Recognizing and adjusting to changes of parenthood
- Working in partnership.

A full list of findings and categories is presented in Appendix V. The categories were further examined to identify if they could be synthesized. Seven synthesized findings were identified:

1. New fatherhood identity
2. Competing challenges of new fatherhood
3. Negative feelings and fears
4. Stress and coping
5. Lack of support
6. What new fathers want
7. Positive aspects of fatherhood.

The ConQual[1] approach to assess the confidence in the level of evidence of each synthesized finding was applied (Summary of Findings). For synthesized findings 1, 2, 3, 4, 5 and 7, the majority of the studies received four to five "yes" responses on the ConQual identified criteria for dependability; therefore, the level of confidence remained unchanged. The findings included a mix of unequivocal and equivocal (credible) ratings, necessitating downgrading by an additional level, resulting in a ConQual score of "moderate". For synthesized finding 6, although the majority of studies (five out of six) scored four or five for the questions on appropriateness of research conduct (meaning no change to the dependability score), the credibility score was downgraded two levels (−2) due to all findings being equivocal (credible). The ConQual score for this finding was "low". The seven synthesized findings are presented below and the relationship between study findings, categories and synthesized findings are illustrated in Tables 2–8.

Synthesized finding 1: New fatherhood identity

Three categories comprising 23 findings were integrated into the first synthesized finding (Table 2). The first category, *being a father, feeling more of a man,* refers to how men perceived themselves as they became fathers for the first time. Their ability to father a child was described as an important achievement in their lives: "My first thought was 'yes! I can have a baby'".[60(p.63)]

Becoming a father also made them feel more masculine and "more of a man". One father described feeling "over the moon. . .I suppose it's like a man thing. It's like you feel more of a man in a way. I know it sounds a bit weird but you feel more a man. . .You feel everything's working and you're alright. So I was over the moon, overjoyed".[53(p.1023)] While another father talked about development and growth resulting from new fatherhood: "I feel, that I'm growing, as a human being. Yes, it's what I'm doing, absolutely. And even as a man. That it's undeniably one kind of confirmation".[54(p.102)]

The second category, *changed priorities, responsibility and expanded vision,* refers to how men acknowledged that the new role of fatherhood led to new responsibilities and priorities. Men talked

about the need to change their lifestyle due to having "another person to think about".

"You've got to leave your juvenile life behind, stop running around with your mates and that. You have to change it... without agreeing to it... you've just got no choice (laughs). Now I've got someone else to think about...".[64(p.89)]

The changes also included taking on the provider role to ensure financial security: " ...there was something in the breadwinner factor that made me feel that I should change my priorities. It happens even before the baby is born. We are building our 'nest' and making more rational decisions than before".[54(p.101)] "Money is also very important. We therefore have to save as much as we can. I need to work as hard as possible. Maybe I'll need some investments as well".[60(p.66)] Most men, however, welcomed these changes and felt were necessary for this new phase in their lives.

The third category, b*eing a good enough dad and getting it right,* refers to how men wanted to be a good father and often worried about "not getting it right". Some men wanted to be more "hands on" with their child and father them differently to how they themselves were fathered: "My father was more removed, I'm much more hands on, my father sat around and did little, my experience is very different, I change nappies, make milk and get up in the middle of the night."[48(p.74)]

Being a good father was seen as being present and spending time with their child: "I think being there for all their first major things is important, i.e. when they're at school, when they go to do a nativity play, going to the nativity play, not saying no I'm too busy at work or, you know, someone will video it for me, or whatever."[56(p.343)]

"A parent who is prepared to put work second and family first, you know, the father who's prepared to do that, I think that's a good father."[56(p.343)]

However, men often worried about not "getting things right" and not being able to fulfill the role of a good father: "I am also worried of not getting it right. Uh... do I let him play on the floor with the baby gym with all the things hanging all over the top; he's interested in that. But do I, do I leave him or not? Do... er... is that not interacting with him enough? But then, if I put him in the cot in his springy seat thing, but what am I supposed to say to him? Am I supposed just to play with him? Cuddle him? Am I supposed to? And... and I don't naturally sort of feel, I don't know what to do"[49(p.156)]

The synthesized finding summarizes how the transition to fatherhood is perceived by men. During this time a new fatherhood identity is formed, which makes them feel more masculine while accomplishing an important new phase in life.

Table 2: Synthesized finding 1: New fatherhood identity

Findings	Categories	Synthesized findings
What it means to be "male" [U] The perceived positive relationship between being male and the ability to father children [U] Feeling of development [U] The caring father might emerge as, in fact, the bigger bloke [C] Accomplishing an important goal in this life phase [C] Proving their ability as men [C]	Being a father, feeling more of a man	*New fatherhood identity:* Becoming a father gave men a new identity, which made them feel like they were fulfilling their role as "men". They recognized that this new role came with changed priorities and responsibilities, which they welcomed; however, they often worried about being a "good father" and "getting it right".
Maintaining health to meet the needs of forthcoming dependents [C] Feeling of responsibility [U] Symbolizing eternal love [C] Preparation for fatherhood [C] Expanded vision [U] Changes associated with the father's role [U] Adjusting priorities [C] Emotional changes experienced [C]	Changed priorities, responsibility and expanded vision	

Table 2. (*Continued*)

Findings	Categories	Synthesized findings
New fathers wish to father differently from their own fathers [U] Worry about being able to manage being both a good provider and a "hands on" father [U] Wanting to cherry pick the best bits from own childhood [C] Wanting to bring baby up in best way [C] Wanting to get things right [U] Worries about being a good enough dad [U] Expanded role of good fathers [C] Dealing with internal and external pressures [C] Good father and father involvement [C]	Being a good enough dad and getting it right	

U, unequivocal; C, credible

Synthesized finding 2: Competing challenges of new fatherhood

This meta-synthesis resulted from five categories, comprising 24 findings (Table 3). The first category, *challenges of balancing work and the role of fatherhood*, refers to the dilemma men experience as a result of having to balance their work responsibilities with being a father.

"I feel as though my work, because my family's number one my work's got to be number one at the moment and it's that, it's that absolutely what seems to be an irreconcilable tension between the fact that you work, you are working for your family and you're trying to build a career. Because you know you want to spend, you're trying to build a career because you want the time and the quality time to spend at home. And you're building a career and as a result you're not getting that quality time to spend at home. So you're wanting both and if you don't have one you haven't got the other half, you know its um its really frustrating"[56(p.346)]

Men particularly worried about "missing out" on spending time with their child, because of work responsibilities: "I hope I'm around in those times when he is learning to play. There is a couple of hours each day when he wants to play and try and talk and stuff. Because I'm at work I hope I don't miss out on that too much. I don't want to come home all the time and [find] him asleep".[47(p.1015)]

"After this last week away and seeing him grow and then going back to work and having 15 minutes a day with him... it has made me realize what I am missing and it is hard because you want to be there and you want to see everything... [The bond] has developed but because I don't get to see him as often as I would like it is a constant worry that it is not developing how I would want it to..."[62(p.50)]

The second category was *deterioration in couple relationship* following the birth of their child. Men reported changes in their relationship with their partner, in some cases needing additional relationship interventions following the birth of their child: "The first week was great, then after that things started to get worse. I never thought that Jenny and I would have fought so much".[47(p.1018)]

"Our relationship between the two of us has deteriorated quite drastically now. We are actually going to see Relate... We go to Relate, we've been to Relate twice because Esme suggested we'd better go to Relate because we were, really we were, our relationship is not touching, not talking, nothing, nothing"[49(p.153)]

There were also *changes to sexual relationship* between couples following childbirth, which formed the third category. While this category resulted from five different findings, they derived from the same study. Generally, the changes referred to a deterioration in sexual activity: "Prior to the birth you think, 'a few weeks abstinence,' but now when the child is born... it can be half a year."[63(p.720)]

Sex was also seen as less of a priority to women than men: "Altogether, sexual life is important in a relationship. To 'K' it comes far down on the priority list. To sleep 10 hours during the night, cleaning the house, doing the laundry and... when all this is done she can start thinking about having sex".[63(p.721)]

The fourth category, *breastfeeding: a difficult experience*, refers to the challenges experienced by new fathers relating specifically to breastfeeding. It

was something that fathers found difficult, anxiety provoking and that they were totally unprepared for: "It was one feeding after another; I was under the impression of having no respite. I knew it would be like that, but I still found it difficult."[52(p.333)]

"I have to say that there I was not prepared at all but had a mental picture that it's just a matter of laying the baby to the breast and it all works. When it didn't work you stood there: aha, what the hell do we do now?"[64(p.88)]

Fathers reported the experience to be more challenging than they had anticipated, which left them feeling "helpless": "Breastfeeding was what I found most difficult. I didn't know how to help, I felt useless."[52(p.333)]

The fifth category was *struggles with bonding with the baby during pregnancy and the early days*. During the pregnancy period, men talked about not "feeling like a father" straightaway: "I don't feel myself as a father, or how should I put it… I don't feel it consciously. It was not like going up stairs and at a certain point, 'I'm a father from today!' Such a feeling didn't come to me. It was more like going up a slope".[58(p.162)]

They struggled to bond with their unborn child as the baby was not growing inside them, " …My wife can share her feelings with me. Sometimes she says the baby is moving inside her. But, actually, as a third person, I can't imagine what that's like".[60(p.65)]

The struggles to bond with their baby continued after the birth. Many expected that they would bond immediately with the child and were surprised when that was not the case: "I thought as a father there would be a bond there straight away with the child. I thought it would just come naturally. I thought because he was mine I was going to be immediately attracted to this child and love would just come naturally. I was surprised I wasn't overcome with feelings for him straight away"[47(p.1017)].

There appeared to be a level of disappointment when the fathers' expectations about bonding with their baby did not meet reality. Many fathers felt that the bond between the mother and child was much stronger.

Therefore, the current synthesized finding summarizes the various challenges experienced by men during their transition to fatherhood.

Table 3: Synthesized finding 2: Competing challenges of new fatherhood

Findings	Categories	Synthesized findings
Renegotiating paid employment and household work or childcare work [U] Going to work/wanting to parent [U] Tensions and difficulties: cash and/or care? [C] Work life [U]	Challenges of balancing work and the role of fatherhood	*Competing challenges of new fatherhood:* Men experienced a number of competing demands as they became fathers. They had to balance work demands with the time they were able to spend with their child. They also experienced a deterioration in their relationship with their partner, which included reduced satisfaction with their sexual relationship. Expectations of new fathers often did not meet reality, especially around breastfeeding and bonding. New fathers found breastfeeding to be a more difficult experience than anticipated, while many also struggled to bond with their babies in utero and in the early days following birth.
Changing relationship with partner [U] Relationship deterioration [U] Maintaining conjugal functioning [C]	Deterioration in couple relationships	
Societal view of sexuality [C] Expectations on sexuality in the relationship after childbirth [U] Changes in the relation after childbirth [C] Experience of sexual life after childbirth [C] Physical and mental alterations in partner [C]	Changes to sexual relationship	
Coping with parental demands [U] Coming to terms with environmental demands [C] Breastfeeding: more challenging than expected [U]	Breastfeeding: a difficult experience	
Expectations and symbolic meaning of fatherhood [U] Feeling of unreality [C] On the inside, looking in [U] Feeling like a father [C] Being aware of the difference between oneself and one's wife [U] Grappling with the reality of the pregnancy and child [C] Discouraged by the inapplicability of the old ways of building relationships [C] Experiences during pregnancy: Feelings of separation [C] Challenges in transition to parenthood [C]	Struggles with bonding with the baby during pregnancy and the early days	

U, unequivocal; C, credible

Synthesized finding 3: Negative feelings and fears

This meta-synthesis resulted from five categories, with 26 findings (Table 4). The first category, *not knowing what to expect and fear of the unknown*, relates to men's expectations of labor, birth and the new father role. Men talked about feeling nervous and unprepared due to not having any previous experience: "I don't know how to interact with my child when she's born... I've never been a father, so I feel quite terrified".[60(p.64)] They often did not know what to expect, "It's like hitting a brick wall It's like, when they put something up, you know it's going to be there but until you actually get there you don't know what to expect".[55(p.296)]

This uncertainty often resulted in men feeling frustrated, excluded and uncertain about how they could help, which formed the second category of *feelings of helplessness*: "You're not overly sure what you're supposed to be doing, and there are times when you have the emotion of complete helplessness."[61(p.6)]

"Um things that I find difficult is not being able to stop that, not being able to stop her crying... That's hard because I feel quite helpless you know when she is really screaming her head off. Then Tanya usually has to breastfeed her or sometimes she just likes to nurse on Tanya, on Tanya's breast just to fall off to sleep sort of thing. So that is difficult not being able to do anything about that, I can't feed her but I can't do anything".[67(p.21)]

The third category was *pushed out of the relationship and struggling to find a role*. Men described not feeling involved with their partner's pregnancy and the birth due to not being able to physically experience the changes: "And I felt really out of the whole thing... I wasn't involved in that (the pregnancy)... I couldn't be because it wasn't in me... and all I could do was be there for her".[49(p.155)] Fathers wanted to be involved in decision making processes but were often left excluded, struggling to find a role.

The fourth category, *fears relating to labor and birth*, referred to the specific concerns expressed by men relating to the birthing process. All three findings in this category were derived from the same study. While men wanted to support their partner through labor and birth, they were often concerned about their ability to deal with it: "First and foremost I hope I don't pass out. Because I don't like needles and all that sort of stuff... It just sends me a bit funny... I'm hoping I won't pass out anyway. But you never know".[53(p.1025)]

The fifth category related to men's *concerns about their partner's and baby's wellbeing*. Men worried about their partner and baby during pregnancy, birth and the early days: "I would like to say that soon my wife will not be suffering any longer. She's been through a hard time; before she became pregnant, and now, while she is expecting this baby. As far as I know, she has gone through many hurdles such as examinations and extracting her legs. I'm not even sure if I could do the whole thing once and she tried many times. So, she is a great woman... Now it's successful and she'll never have to go through any more suffering!"[60(p.63)]

All five categories in this synthesized finding related to negative feelings and fears experienced by men during their transition to fatherhood.

Table 4: Synthesized finding 3: Negative feelings and fears

Findings	Categories	Synthesized findings
The birth [C] Fatherhood [C] Feeling of insufficiency and inadequacy [C] Expectations [U] A different mission and challenge [C] Challenges in pregnancy, childbirth, and parenting as husbands/partners [C]	Not knowing what to expect and fear of the unknown	*Negative feelings and fears:* Expectant and new fathers experienced a range of fears and often did not know what to expect from the processes involved during the transition to fatherhood.

Table 4. (*Continued*)

Findings	Categories	Synthesized findings
Deference and support: a moral response [C] Plugging away at the role-making of involved fatherhood [U] Fatherhood – the early days: helplessness [U] Feelings of exclusion [C]	Feelings of helplessness	This resulted in fathers feeling helpless, pushed out of the relationship and struggling to find a role. Men experienced specific fears relating to their partner's labor and the birthing process. They often worried about the wellbeing of their partner and baby throughout the perinatal period.
Excitement thwarted by partner's reticence [C] The focus shifting from us to him [U] Feeling left/pushed out [U] Struggling to find a role [U] Apprehension about criticism [C] Helping out or "full involvement"? Fairness, equity and decision making [U]	Pushed out of the relationship and struggling to find a role	
Aspects of the labor and birth [U] "Being there": men's experiences of the labor and birth – cesarean [U]	Fears relating to labor and birth	
Childbirth perceived as a shared experience and being there [C] Realizing oneself as a husband [C] Finding the wife's pregnancy and delivery for the first time to be an impressive experience [C] Ending their wives' discomfort [C] The health status of his wife and fetus [C] The wonder of fetal movement [C] Imagining life and needs with a baby: fantasies and fears [C] Making active efforts in preparation for childbirth in a foreign country [C]	Concerns about their partner's and baby's wellbeing	

U, unequivocal; C, credible

Synthesized finding 4: Stress and coping

This meta-synthesis resulted from two categories, comprising 15 findings (Table 5). The first category was *restrictions, frustrations and stresses of new fatherhood*. Many fathers acknowledged the restrictions of their new role and not being able to do all the things that they wanted to do, which often led to frustration.

"One of the feelings I have been getting is of… I can't do all the things I want to do. I found it very frustrating… I've been on leave for quite a lot recently… I find it very frustrating when I can't, I can't get to go and do something I want to do like… like the washing… something simple like that".[49(p.158)]

"Um… I didn't quite understand, I don't think I quite understood how full on babies are. Er… they're 100% and more. They take over your life and there's no… you don't have a life in effect really".[49(p.158)]

New fathers experienced tiredness, sleeplessness, exhaustion and irritation,[52,56,65] which increased their stress levels in the postnatal period. One father described stress as the "non-stop-ness of it"[50(p.5)] due to having a stressful job and no time to relax.

Signs of stress and coping mechanisms was the second category. Fathers talked about feeling grumpy and snappy as a result of the tiredness and stress, which they often managed through

distraction techniques, such as getting engrossed in work, listening to music or smoking. "I'm probably the sort of bloke who actually just says, 'oh I'm quite forgetful, so I can forget I've had the worst night ever'. I just try and forget it. So that's probably my coping mechanism. It's just, trying to forget it and I generally do. And then, I guess, I've found in some ways, work quite helpful in that respect, because you can have a crazy night where you have no idea what's going on with [son's name], but I can go to work and I feel fine. I'm in control here, I know what to do. There's people who I can actually communicate with, they'll do what I ask them to do and vice versa. So I'm probably not the best example, the best person to ask, because I think I just choose to ignore. I'm probably more of an ignorer, which isn't probably that helpful for [partner's name]."[50(p.8)]

"... She often complains that I download 'noise' from the internet. She thinks it's not music. I feel bad when she keeps going on at me about this. I just go outside and have a smoke".[60(p.65)]

Synthesized finding 5: Lack of support

This meta-synthesis was derived from 20 findings and three categories: *societal expectations and lack of social/peer support, lack of tailored support or information resources for fathers,* and *lack of acknowledgment and involvement by health professionals* (Table 6).

Many men talked about the lack of understanding from male friends and work colleagues about the challenges associated with their new role as fathers. They described not finding "anybody that is real understanding",[59(p.14)] feeling they had "drifted incredibly far apart" from friends[54(p.101)] and how peers "just take the mickey really keep telling me my life as I know it is over".[53(p.1026)]

The lack of tailored support and information resources for fathers was apparent. Men were unaware of resources designed specifically for "dads", and felt services were mainly aimed at women. Many felt excluded by health professionals and described feeling like a "spare part"[50(p.10)]

Table 5: Synthesized finding 4: Stress and coping

Findings	Categories	Synthesized findings
Challenges of combining new fatherhood and traditional narratives [U] Life's restrictions on becoming a parent [U] Articulating and attributing stress [U] Protecting the partnership [U] Coming to terms with the physical and emotional changes during the postpartum period [U] Whose needs? Whose values? Selflessness and autonomy in dialogue [C] Being tired and bound [C] Understanding emotional reactions [C]	Restrictions, frustrations and stresses of new fatherhood	*Stress and coping:* The role restrictions and changes in lifestyle resulted in increased stress levels in new fathers, which manifested as tiredness, irritability and frustration. Fathers used denial or escape activities, such as smoking, working longer hours or listening to music as coping techniques.
Engaging with traditional fatherhood [U] Not engaging with fatherhood [U] What is expected of men is different to how I feel! [C] Legitimacy of paternal stress and entitlement to health professionals' support: Symptoms and manifestation [U] Managing stress through distraction, denial and release [U] Disclosing personal difficulties [U] Adjustment [C]	Signs of stress and coping mechanisms	

U, unequivocal; C, credible

Table 6: Synthesized finding 5: Lack of support

Findings	Categories	Synthesized findings
Male friends at work unable to offer support [C] Social support [U] Feeling of social changes [U] Struggling for recognition as a parent from mate, co-workers, friends, family, baby and society [U] Government and society [U]	Societal expectations and lack of social/peer support	*Lack of support:* New fathers lacked support from their male work colleagues and peers. The main barriers to new fathers accessing or receiving adequate support were related to the lack of resources aimed specifically at men. Men were often not viewed or treated as equal partners and lacked acknowledgment or involvement by health professionals during their transition to fatherhood.
Lack of guidance and obstacles for achieving new fatherhood [U] Diversity of men's support networks: lack of information resources tailored to men [C] Information [C] Support [U] Lack of knowledge about childbirth [U] Experience of the NHS and father's wellbeing [U]	Lack of tailored support or information resources for fathers	
Determination and sustained effort required to challenge the constructions of fatherhood [U] Entitlement to health professionals' support [U] Involvement in healthcare provision [C] Self and other interacting with nurses: exchanging information with nurses [U] "Being there": men's experiences of the labor and birth – presence during labor [C] "Being there": men's experiences of the labor and birth – healthcare professional [C] Feeling of exclusion [U] Present, but not participating [U] Imagining life and needs with a baby: gendered roles [C]	Lack of acknowledgment and involvement by health professionals	

U, unequivocal; C, credible; NHS, National Health Service

and made "out to be a complete idiot".[66(p.49)] They were often not acknowledged as equal partners in the process as health professionals mainly focused on the mother. Many men, however, accepted this, as they felt their partners' needs should be prioritized when healthcare resources are limited.

Synthesized finding 6: What new fathers want

Two categories including 14 findings were integrated into the sixth synthesized finding (Table 7). The first category, *need for guidance around preparing for fatherhood and relationship changes*, refers to the identified perceived needs of first time fathers. They wanted practical advice around clothing, feeding and routines for the baby, as well as information around changes in their relationship with their partner following the birth of the baby, including sexual relationships.

"I would look now to wanting more information about what to do when I've actually got it... even little things like what clothing, when you put it to bed, getting into a routine, even the basics, really".[51(p.630)]

"You are both tired, niggling at each other, and it was probably slightly worse from what we thought. I mean, if the awareness could have been made a lot more, because no one ever really spoke to us about that other side...the relationship with us and the baby. We sort of sat down and we tried about two or three different ways and thought about this".[51(p.631)]

"The midwife was very nice... and she asked: do you have any questions? But you don't have any questions if you don't know what is coming. I would know now (after birth) what to ask".[64(p.90)]

Fathers identified a number of different sources of information and support that would be helpful,

which formed the second category, *preferred sources of information and support*. Many valued face to face contact, where information relating to the transition to parenthood was provided by a professional but felt that a variety of methods should be available to fathers.

"I learn most when someone tells me things... absolutely. So, I prefer that. But it's probably that you need to have a mixture of things... because some learn by reading and seeing".[64(p.90)]

Others talked about having access to parenting groups or DVDs involving other parents, with similar experiences: "Seeing [on the DVD] not the specialists, not the experts but the guys who were actually going through that situation without knowing much, the way we do. I could identify with those".[66(p.50)]

One father talked about the importance of making the information fun and humorous to capture their interest, while another talked about the dilemmas of using the internet due to not knowing how credible the information is: "Information needs to be well choreographed, it needs to capture our interest, it needs to be given in a fun way. Use humor: situations can afterwards be looked at as funny or comic but when you are in it, it's like a matter of life or death".[64(p.90)]

"I looked at YouTube, but you don't know to a hundred percent which... what experience those showing the film have...Yes, if you think a bit... is it something good or can it be harmful... "[64(p.90)]

Family members, parents and parents-in-law, were seen as good sources of support, where available. Routine enquiry about emotional wellbeing, however, was questioned, as fathers were uncertain about their primary care professionals' training around emotional wellbeing and ability to provide adequate support. In regard to screening questionnaires, men's willingness to complete them would depend on how long the form was, how they were feeling at the time, their perceived value of completing it at the time and if there were competing priorities.

Table 7: Synthesized finding 6: What new fathers want

Findings	Categories	Synthesized findings
"Formal" peer support and opportunities to meet other fathers [C] Preparation for fatherhood [C] Parents' relationships [C] Acknowledging ones' limitations [C] The need for guidance [C]	Need for guidance around preparing for fatherhood and relationship changes	*What new fathers want:* More guidance and support around the preparation for fatherhood, and relationship changes with their partner were identified as needs for first-time fathers. Having a variety of support mechanisms in place to include parenting groups involving others with similar experiences, father-friendly resources and father-inclusive services were useful strategies to support their mental health and wellbeing.
Pre-existing networks - friends, family and the wider community [C] Parental groups: the good and the bad [C] Internet as an asset or a worrier [C] Information: the when and how [C] Social support received [C] Suggestions for improvement to the current maternity care [C] Preferred sources of information and support [C] The role of primary care in mental health care for new parents: routine enquiry [C] The role of primary care in mental health care for new parents: screening questionnaires [C]	Preferred sources of information and support	

C, credible

Synthesized finding 7: Positive aspects of fatherhood

This meta-synthesis resulted from three categories of 20 findings on positive aspects of transition to fatherhood (Table 8). The first category related to *the rewards of bonding with their child*. The more time men spent with their children, the more confident they felt as fathers, and they reported the experience to be extremely rewarding: "The sleepless nights do take their toll on you, but I don't know if it's just the way that I think... but I tend to look at the bigger picture. I just think I'm happy because she's healthy, she's smiling... So I think, well, I must be doing something half right for her to be trotting around as she does, and she's happy with me".[50(p.9)]

"I think the nicest bit is just spending time sitting around on the bed and just playing with him, and just talking to him and being talked back at, and changing his nappy when that happens as well and, you know, time looking at him and him looking at me really is the bit that I'm really enjoying".[56(p.344)]

The second category, *recognizing and adjusting to changes of parenthood,* refers to fathers who recognized and accepted the changes to their lifestyles. They also appeared to make better adjustments to the new role of fatherhood: "Talking about meals, if at restaurants, I'm afraid that my daughter will cry to bother people, so I come to think of eating at home. I think our eating style has changed. But for me, it's not something inconvenient, unpleasant, nor restricted. Rather, I am enjoying the time".[58(p.163)]"Initially it is all about trial and error, at least that's how it was for us, purely trial and error... in the early days we were both sort of saying, what's wrong with him? Is it his nappy? Is it food? Is it sleep? And you go through that sort of list until you find something that makes him quiet and you go, well it was that then, and so you start to notice those signs a little more each time".[61(p.6)]

The third category, *working in partnership*, refers to couples who communicated well and worked together to address the challenges of parenthood.[50,61,65,66]

"Another thing we did was the both of us were getting up in the night to deal with [our daughter] and we soon realized that maybe I needed some more sleep so Anna [wife] would get up and do all the night feeds one night and I would do all the night feeds the next night... we soon got her onto the bottle so I could help out with the dream feeds while Anna slept and when she got up to do the next feed I would be able to go to sleep... working in partnership is key".[61(p.6)]

"We've talked... through the whole pregnancy because things can change – what you think and believe. That way you avoid irritation and rows".[64(p.89)]

Table 8: Synthesized finding 7: Positive aspects of fatherhood

Findings	Categories	Synthesized findings
Navigating fatherhood: Strength through fatherhood as rewarding [U] Feeling of reality [C] Transition to mastery [C] The pleasures, benefits and rewards of bonding with their child [U] Sharing time and space with one's child [C] Engagement [U] Fatherhood – the early days: gaining confidence and regaining control [C] Bonding and co-parenting [U]	The rewards of bonding with their child	*Positive aspects of fatherhood:* There were a number of positive aspects related to new fatherhood. Fathers who were involved with their child and bonded with them over time found the experience to be rewarding. Those who recognized the need for change, adjusted better to the new role, especially when they worked together with their partners.

Table 8. (*Continued*)

Findings	Categories	Synthesized findings
Reality [C] Being aware of a change and trying to adjust to a new life [U] Fatherhood – the early days: trial and error parenting [U] Caring for the baby in both health and illness [C] Still being a couple but not as before [C] Imagining life and needs with a baby: relationships [C]	Recognizing and adjusting to changes of parenthood	
Feeling prepared and (changing) expectations [C] Fatherhood – the early days: she leads, I follow [C] Fatherhood – the early days: working together [C] Communicating with ones' partner [C] Forming a fatherhood identity [C] Adaptive and supportive behaviors adopted [C]	Working in partnership	

U, unequivocal; C, credible

Discussion

This qualitative systematic review aimed to explore the experiences and needs of first time fathers in relation to their mental health and wellbeing during the transition to fatherhood. Twenty-two papers were included in the review after a rigorous search and inclusion process. While all included papers focused on the general experiences of expectant or new fathers, only three specifically addressed the mental health and wellbeing of first time fathers. Dallos and Nokes[49] explored the experience of a first time father who encountered psychological difficulties following the birth of their baby; Darwin *et al.*[50] looked at fathers' views and experiences of paternal perinatal mental health; and Rowe *et al.*[66] investigated first time expectant couples' anticipated needs and preferred sources of mental health information and support. The remaining papers, although focused on general experiences of first time fathers did report on factors that affected their mental health and wellbeing in line with the review objectives.

All included papers were of moderate to high quality (scores 5–10) based on the JBI Critical Appraisal Checklist for Qualitative Research. However, when ConQual criteria[1] determining dependability were considered in conjunction with criteria determining credibility, the level of evidence for six of the synthesized findings were rated as moderate, and one synthesized finding was rated as low. This discussion will examine each synthesized finding and consider implications for practice and further research.

The synthesized findings described men's experiences of first time fatherhood characterized by the formation of fatherhood identity, the competing challenges of their new role and the negative feelings and fears arising from the changes. For many new fathers the transition to fatherhood was the "best experience" in their lives.[65] The ability to father a child made men feel like they were accomplishing an important phase in their lives,[54,60] which made them feel more masculine and "more of a man".[53,56] While their new role came with additional responsibilities, it gave men an expanded vision for the future.[53,54,60,64] In addition, most men wanted to be good fathers and worried about "not getting it right". The concept of "good fathering" was linked to their ability to financially provide for their child, supporting previous study findings where fathers viewed their financial duty as part of their identity and self-worth.[69]

The additional responsibilities and pressures to be a "good father" and meet expectations as a "father" and a "man" impact on men's mental health and

wellbeing, particularly as they become a father for the first time.[26] The current review found that men faced competing challenges during their transition to fatherhood and worried about "missing out" on moments with their child due to work demands and responsibilities.[47,49,56] This is similar to the findings of a literature review in which fathers were reported to find the year following their child's birth particularly challenging due to the conflicting needs to balance personal and work-related necessities with their new role as a parent, meet emotional and relational needs of their family, and deal with societal and economic pressures.[24]

An important finding of the current review was that many men experienced a deterioration in their relationship with their partner following the birth of their child,[47,49,52] including changes in their sexual relationships.[64] This is not uncommon as the reduction in positive communication between couples following birth has been linked to a decline in relationship and marital satisfaction as well as an increase in conflict.[70,71,72,73,74] In a study by Darwin *et al.*[50], new fathers' lack of sleep and emotional exhaustion led to increased levels of stress, which also impacted negatively on couple relationships as couples spent less time together and received less emotional support from one another. If relationships between couples following the birth of their child are fraught, postnatal depression may be more likely to develop in both parents in the first year of birth.[75] Poor couple relationships and satisfaction are risk factors that have previously been associated with anxiety and depression in men during and following the period of transition to fatherhood.[12,13,35,36] Although men talked about changes to their sexual relationships with their partner following the birth of their child,[63] this was not necessarily perceived as a negative aspect. However, findings from this review show that new fathers would have preferred to know about some these possible challenges before the birth, so that they could be prepared for such relationship changes.

Another challenge experienced by new fathers in the review was related to breastfeeding. It was something that fathers found anxiety provoking and that they were totally unprepared for in terms of how to support their partner.[53,65] Fathers reported experiences to be more challenging than they had anticipated, which left them feeling "helpless". This suggests that fathers need appropriate information about breastfeeding prior to the birth of their baby and planned, ongoing support following the birth to ensure that they are well informed and can better support their partners. These findings were consistent with previous research which suggests that the attributes of positive father support in relation to breastfeeding is dependent on the father's knowledge about breastfeeding, their attitudes to breastfeeding, their involvement in the decision-making process about breastfeeding and their ability to provide practical and emotional support to their partner.[76] There are a number of other benefits in providing fathers with this support: a woman's decision to breastfeed is often influenced by her partner's attitudes and behaviors towards breastfeeding;[77] women feel more confident and capable about breastfeeding when their partner is supportive and involved, and breastfeeding is likely to be more successful.[78] Successful breastfeeding also has the potential to positively influence the relationship between the parents.[77]

During the antenatal period, men described not "feeling like a father" straightaway[58(p.162)] and struggled to bond with their unborn child.[60(p.65)] Their struggles to bond with their baby continued after birth. This is important, with increasing evidence of the important role fathers' play, not only in the lives of their partners, but in the health and wellbeing of their children. Fathers who are affectionate, supportive and involved, can contribute positively to their child's cognitive, language and social development.[79] Children who have more positive relationships with their fathers tend to have fewer behavioral problems at school,[80] which is strongly linked with higher educational attainment, especially in relation to their levels of literacy.[81-83]

Expectant and new fathers experienced negative feelings and fears relating to not knowing what to expect of their roles, leaving them feeling nervous and unprepared. This uncertainty often resulted in men feeling helpless and excluded, similar to findings reported by Hildingsson and Thomas,[84] who found new fathers experienced negative feelings about the pregnancy, the upcoming birth and the first weeks of fatherhood with a newborn baby. In the current review, men also expressed fears relating to labor and birth, as well as concerns about their partner's and baby's wellbeing. This is in line with findings of Hanson *et al.*[85] that, before the birth, fathers often expressed fear for the safety of their partner and the

baby, anxiety and fear about observing their partner in pain, feelings of helplessness, lack of knowledge about the birthing process and concerns about risks of interventions such as operative delivery, limited finances and parenting skills. Similarly, in the recent quantitative systematic review by Philpott *et al.*, stress levels in fathers were found to increase in the antenatal period due to negative feelings about the pregnancy, role restrictions related to becoming a father, fear of childbirth and feelings of incompetence about infant care.[23] High anxiety and depressive symptoms during pregnancy were the most significant predictors of depression in men in the postnatal period,[7] highlighting the need for better information and support for expectant fathers in the antenatal and postnatal period.

The current review found that, following the birth, men felt excluded from the relationship with their partner as the focus tended to be on the baby, which often left them struggling to find a role.[49,56] The role restrictions and changes in lifestyle often resulted in stress, which manifested as tiredness, irritability and frustration. These findings are consistent with those in other studies,[23,86] where feeling pushed out and role restrictions related to becoming a father were contributory factors for paternal stress in the perinatal period. Tiredness and stress, were managed by many men through distraction techniques, such as getting engrossed in work, listening to music or smoking.[50,60] Denial was another coping mechanism and some fathers felt that they did not have the right to share their concerns or worries as they did not view them as being important.[50,53] Men's reluctance to discuss their own mental health concerns, due to wanting to protect their partner, and engaging in escape activities such as overwork, sports, sex, gambling or excessive drinking to cope with stress have been reported previously.[87-90]

The lack of social and peer support available for first time fathers was an important finding of this review given the impact on fathers' mental health and wellbeing. Castle *et al.*,[91] in a study of 66 first time expectant fathers, reported perceived social support to be a protective factor, with fathers who reported higher levels of perceived social support throughout the pregnancy experiencing lower levels of depression and distress six weeks post-delivery. Poor social support is also associated with antenatal depressive symptoms in fathers.[92,93] Fathers were unaware of resources that were designed specifically for "dads", and felt that the services were mainly aimed at women.[50,51] Many fathers felt excluded by health professionals, who mainly focused on the mother, and often not acknowledged as equal partners in the process. These findings are also consistent with previously identified literature, where fathers have reported feeling marginalized by health professionals during the perinatal period and not having access to appropriate information from the fathers' perspective on pregnancy, birth, child care, and balancing work and family responsibilities.[34-38]

Evidence from included studies showed that new fathers expressed a need for more guidance around the preparation for fatherhood. This included practical advice around clothing, feeding and routines for the baby, and information around relationship changes with their partner following the birth of the baby, including sexual relationships. Poor couple relationships, feeding difficulties and anxieties relating to the tasks of early fatherhood have previously been associated with poor mental health in fathers in the perinatal period.[4,51,75,94] Supporting strong couple relationships, engaging with fathers, and supporting the transition to parenthood for first time parents have all been highlighted as priorities for the national Healthy Child Programme in England;[42,95] however, meeting these needs in practice remains an issue.

Having a variety of support mechanisms in place, including parenting groups that involve other new fathers, resources that are father-friendly and services that are father-inclusive, were perceived to be useful strategies that would support fathers' mental health and wellbeing. The evidence included in this review, however, did not identify when the optimal time in the perinatal period would be to provide information or support to new fathers in preparation for fatherhood.

Although there were many challenges in becoming a first time father, several positive aspects were identified. Many fathers did not bond with their child straightaway as discussed earlier, but the more time they spent with their child, the more confident they became and reported the experience as extremely rewarding.[50,54-56] Managing new fathers' expectations and encouraging them to be involved with their child in the early days would help them to bond and promote better outcomes for the whole family. Fathers who are affectionate, supportive and involved in their child's care and upbringing

contribute positively to their child's cognitive, language and social development,[79] with potential to generate social, academic and economic benefits in the future.[93,94,96] Conversely, fathers who are disengaged with their children at three months postpartum have been shown as a predicting factor for behavioral problems in children.[97] Close connections with their children can also lead to positive outcomes for fathers themselves, including satisfaction with family life,[98] higher levels of satisfaction in mid-life,[99] and lower likelihood of separation/divorce.[100] There are other benefits associated with father engagement and health and wellbeing of their partners. Positive father involvement with childcare and household tasks have been associated with lower levels of stress and depression in mothers[101] and paternal support has been strongly correlated with lower rates of depression in women.[102]

Fathers who recognized and accepted lifestyle changes made better adjustments to the new role of fatherhood[58,61,65] and couples who were better prepared worked stronger in partnership to address challenges of parenthood.[50,61,65,66] This shows the importance of adequately preparing couples for the changes parenthood brings and finding ways to enable them to work together and support each other in early weeks and months following the birth. The importance of the quality of the man's relationship with his partner during the antenatal, intrapartum and postnatal period was a key element to the transition to parenthood in the literature review of 32 studies, by Genesoni and Tallandini.[24]

As there are no known previous qualitative systematic reviews on this topic area, the findings of this review have important implications for practice, particularly relating to the way in which care is offered to fathers and families in the perinatal period. It provides evidence from an international perspective of first time fathers' experiences of new fatherhood and highlights gaps in the current service provision. Healthcare professionals need to be aware of the dilemmas and challenges new fathers face in order to better support their mental health and wellbeing during this crucial period.

Limitations

It is acknowledged that the included studies lacked homogeneity to a certain extent. Of the 22 included studies, 19 explored the general experiences of expectant or new fathers, while only three focused specifically on the mental health and wellbeing of first time fathers. Furthermore, each study concentrated on different periods of transition to fatherhood. For example, some concentrated on the antenatal period, while some focused on the early weeks following birth and others on the early months. As the meta-aggregative approach used pooled findings based upon thematic or descriptive similarities, these different factors are unlikely to confound the results of the review, but rather add to them by creating a better understanding of new fathers' experiences throughout the perinatal period.

Although there was variation with regards to age and occupation of first time fathers across the included studies, the lack of ethnic diversity was noted. Of the nine UK studies, participants in six of them were of a White background. The ethnic homogeneity in the UK based studies highlights the need for more research on mental health and wellbeing needs of fathers from other ethnic groups, as these studies do not reflect the ethnic diversity of the UK population. Similarly, participants in the majority of the remaining studies also lacked ethnic diversity,[54,58,60,63,68] and three studies did not describe the ethnicity of study participants.[47,48,56]

Sample sizes in two included studies should also be considered. The study by Shirani and Henwood[67] included two first time fathers and the study by Dallos and Nokes[49] included one. As the main focus of this review was to gain better understanding of first time fathers' experiences and needs, these studies were considered to be useful, with similarities noted between the findings generated from these studies and the others included in the review.

A limitation of only including first time *resident* fathers means that the mental health and wellbeing needs of non-resident fathers remain unknown. Although this review set out to include non-biological fathers, such as adoptive fathers and stepfathers, the review did not identify any studies on these groups of fathers, highlighting a gap in research around non-biological fathers' mental health and wellbeing needs during the perinatal period. This review excluded non-English language studies due to resource/time constraints, meaning that cultural, country specific and other insights into the role of first time fathers from a global perspective could not be elicited. Considering such studies in future research could be helpful.

It is acknowledged that as this is a qualitative systematic review, generalizability of results is not possible. However, the studies were carried out across eight different countries and included participants from different age groups, ranging from 18 to 58 years, and various occupational groups from unemployed to higher managerial/professional groups. These qualitative studies provide useful insights in the context in which mental health and wellbeing is experienced by new fathers, as well as rich narrative illustrations from individuals, which provide better understanding of the specific needs from the perspective of first time fathers.

Conclusions

The aim of this review was to identify first time fathers' needs and experiences in relation to their mental health and wellbeing during their transition to fatherhood. Three main factors were identified: the formation of the fatherhood identity, the competing challenges of the new fatherhood role and the negative feelings and fears relating associated with it. Role restrictions and changes in lifestyle often resulted in stress, which manifested as tiredness, irritability and frustration. Fathers used denial or escape activities, such as smoking, working longer hours or listening to music, as coping techniques.

More guidance and support around the preparation for fatherhood and consequent relationship changes with their partner were identified as important for first time fathers. Having support mechanisms in place, including parenting groups involving others with similar experiences, father-friendly resources (containing information from a father's perspective) and father-inclusive services were perceived as useful strategies that would support mental health and wellbeing. The main barriers to accessing support included a lack of resources specifically aimed at fathers and lack of health professional engagement with fathers. Many fathers also lacked support from their male work colleagues and peers.

A number of positive aspects were identified. Fathers who were involved with their child and bonded with them over time found their experiences to be rewarding. Those who recognized the need for change in their life and relationships, adjusted better to their new role, especially when they worked together with their partners. Better preparation for fatherhood and support for couple relationships during the transition to parenthood could facilitate better mental health and wellbeing in new fathers, resulting in better experiences of their transition to parenthood.

Recommendations for practice

The following recommendations are based on the findings from this qualitative systematic review, which represent Level 1 evidence (see Appendix VI for JBI Levels of Evidence Recommendation).[103] The evidence from meta-syntheses 1, 2, 3, 4, 5 and 7 were rated as "moderate" on the ConQual assessment[1] and therefore could be used to inform practice. Each recommendation is assigned a grade, either "strong" (Grade A) or "weak" (Grade B) for easy interpretation by clinicians and service users, according to JBI Grades of Recommendation Criteria (Appendix VII).

Health professionals should routinely inform and educate expectant fathers about the changes and challenges they may experience during their transition to fatherhood, and offer information on where they could access appropriate resources and support (Grade A). First time fathers must be better prepared for parenthood, with particular focus on difficulties associated with balancing competing demands. Health professionals play an essential part in ensuring that both parents recognize the importance of their roles within the family and that fathers are enabled to contribute positively to their partner and child's health and wellbeing. Fathers should be routinely encouraged to attend antenatal appointments and, when present, informed about the importance of attachment and how they can bond with their newborn babies, including "skin-to-skin" contact. Fathers should be encouraged to spend time with their babies, holding them as often as possible and engaging in verbal exchanges when changing and feeding them, to help them to develop confidence and skills in parenting. If fathers are adequately prepared, then they are likely to have more realistic expectations about what to expect following the birth, reducing the chances of disappointment in the postnatal period (Grade A). Informing fathers about the importance of their involvement to the child's development and how rewarding this could be to them, could encourage new fathers to develop skills and self-confidence in their parenting (Grade A).

Health professionals should focus on couple relationships, including potential changes to sexual relations, and discuss the importance of this with both parents in the antenatal and postnatal period. This could help couples manage their expectations of parenthood and encourage them to use more positive forms of problem-solving to avoid relationship deterioration during the perinatal period (Grade A). In the UK, health visitors (Specialist Community Public Health Nurses) have been identified to be in a prime position to discuss couple and parenting relationships, which can contribute positively to the mental health and wellbeing of families with new babies.[104,105] Health professionals should provide new fathers with information about the labor and childbirth process, as well as advice of how they could feel involved with their partner and baby in the early and longer-term postnatal period (Grade A).

Synthesized Finding 4 highlighted the restrictions, frustrations and stresses experienced by first time fathers, how they were manifested and mechanisms that men used to cope with them. Health professionals need to be aware of these, as the signs, symptoms and coping mechanisms in new fathers may be different to those displayed by new mothers. They need to provide fathers with adequate support and resources aimed at reducing stress and improving mental health. Where necessary health professionals should make appropriate referrals for fathers to other professionals (Grade A). Health services need to adopt a father-inclusive model for supporting new parents so that fathers feel acknowledged and adequately supported. There is a need for more father-inclusive resources tailored to address their needs and resonate with their experiences (Grade A).

Based on the ConQual assessment, Synthesized Finding 6 was rated as "low", indicating that the finding should be considered with caution. Although the recommendations for practice are unlikely to have negative impacts and could enhance and better prepare fathers for their transition to fatherhood, the evidence supporting its use was considered "weak", therefore this synthesized finding was given a JBI Grade B level of recommendation. Expectant and new fathers should be offered practical advice, information and guidance around caring for their new baby, to include bathing, feeding and sleep routines for the baby. A variety of sources of support should be offered, including face-to-face contacts, online resources and DVDs. Resources need to be evidence-based and credible. This will allow men to choose type of support that suits them (Grade B). Health professionals working with first time fathers should routinely inform parents about their ability to assess perinatal mental health and their role in supporting paternal mental health and wellbeing during this period. However as the ConQual rating for this finding is "low", it is not known whether this would be acceptable or welcomed by new fathers.

Recommendations for research

The fathers in the primary studies included in this review lacked ethnic diversity. Considering the cultural diversity of today's society in most high-income countries, further research including first time fathers from different ethnic and cultural backgrounds would provide a much broader understanding of fathers' mental health and wellbeing needs during their transition to fatherhood.

As this review only included first time resident fathers, the mental health and wellbeing needs and experiences of non-resident and/or subsequent fathers remain unknown, which is another area that could be considered for future research. This review did not identify any studies on non-biological fathers, such as adoptive fathers or stepfathers, highlighting a gap in research around these groups of fathers' mental health and wellbeing needs during the perinatal period. Studies not published in English were not included due to time/resource constraints; however, including these in any future systematic reviews may provide further useful information or insight from certain countries and cultures.

The findings relating to *what new fathers want* (Synthesized Finding 6) needs further exploration as the rating of confidence (ConQual) was "low", limiting its ability to inform practice. To better support first time fathers' mental health and wellbeing during their transition to fatherhood, it is important to establish what support new fathers want and what interventions would be acceptable to them. While this review identified that first time fathers would like support through a variety of sources, the evidence for this recommendation was considered to be "weak", suggesting the need for further research into the type of support that fathers may want, how it is provided and by whom, and when the optimal time in the perinatal period would be to provide this. Another aspect that remains unclear is around the routine mental health enquiry or screening for new

fathers by health professionals. It would be helpful to carry out further qualitative research in this area to ascertain men's perceptions and receptiveness of this.

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Appendix I: Databases and websites searched and number of papers initially identified for the systematic review

Database	Number of papers identified
MEDLINE (Ovid)	281
CINAHL	232
Embase	12
PsycINFO	42
Maternity and Infant Care	27
HMIC	9
British Nursing Index	29
Web of Science	115
ProQuest Dissertations and Theses Global	3
World Cat Dissertations and Theses (OCLC)	3
The Fatherhood Institute	4

Appendix II: Search strategy for MEDLINE (17/03/17)

1. Father*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
2. Men*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
3. Paternal.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
4. Dad*.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
5. postnatal.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
6. perinatal.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
7. prenatal.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
8. antenatal.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
9. antepartum.mp. [mp = title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
10. Mental Health/
11. Stress, Psychological/ or Mental Disorders/ or Mental Health/ or Anxiety/ or Depression/
12. Mental Health/ or "Quality of Life"/
13. Emotions/ or Expressed Emotion/ or Stress, Psychological/
14. Stress Disorders, Traumatic/ or Stress Disorders, Post-Traumatic/ or Stress, Psychological/ or Stress, Physiological/
15. Depression, Postpartum/
16. Anxiety/ or Depression/ or Depressive Disorder/ or Depression, Postpartum/ or Risk Factors/
17. Anxiety/
18. distress.mp.
19. 1 or 2 or 3 or 4
20. 5 or 6 or 7 or 8 or 9
21. 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18
22. 19 and 20 and 21
23. limit 22 to english language
24. limit 23 to yr = "1960 -Current"

Appendix III: Characteristics of included studies

No.	Author and year	Methodology	Method	Setting/ country	Partici-pants	Phenomena of interest	Data analysis	Authors' conclusions
1.	Barclay and Lup-ton 1999[48]	Discourse analysis	In-depth face to face semi-structured interviews	Sydney hospital Australia	15 first-time fathers	Expectations and experi-ences of first time father-hood	Discourse analysis	Early weeks and months of fatherhood were more uncomfort-able than rewarding, despite fathers looking forward to fatherhood very positively. Fathers found it diffi-cult to meet social expectations and roles of simultaneously being the provider, emotional and practi-cal supporter for their partners and bonding with their child.
2.	Bozlan *et al.* 2008[49]	Discourse analysis	Structured face-to-face and telephone interviews	Childhood centres in Sydney Australia	40 cou-ples–40 first-time fathers	Insight into the way in which new fathers negoti-ate their chan-ged status.	Discourse analysis	Those fathers having least flexibility and autonomy in their work report experiencing more unhappiness, anxiety and generally higher levels of stress. These findings suggest increasing workplace flexibility and provi-sions such as parental leave are important for men's post-natal mental health.
3.	Dallos and Nokes 2011[50]	Interpretive Phenomeno-logical Analy-sis	Semi-struc-tured face to face interview	Clinical Health Psychology setting United Kingdom	1 first time father White Brit-ish	Experiences of men as first-time fathers who were encountering psychological difficulties fol-lowing the birth of a baby.	Interpretive Phenomeno-logical Analy-sis	Men's experiences of distress may be linked to prevalent yet con-tradictory discourse directly linked to expectations about their roles following childbirth. The role of services might be to provide support for the father to enable him to support his partner and at the same time to empower him in his role as father.

(*Continued*)

No.	Author and year	Methodology	Method	Setting/ country	Partici-pants	Phenomena of interest	Data analysis	Authors' conclusions
4.	Darwin *et al.* 2017[51]	Interpretive qualitative	In-depth semi-structured face to face and telephone interviews	Partici-pant's home or University setting North Yorkshire and East Lincoln-shire, United Kingdom	There were 19 fathers in total but 14 were first-time fathers. All White.	Fathers views and experi-ences of pater-nal perinatal mental health	Thematic analysis	Fathers experience psychological distress in the perinatal period but question the legiti-macy of their experi-ences. Men may thus be reluctant to express their support needs or seek help amid con-cerns that to do so would detract from their partner's needs. Resources are needed that are tailored to men, framed around fatherhood, rather than mental health or mental illness, and align men's self-care with their role as sup-porter and protector.
5.	Deave and Johnson 2008[52]	Qualitative	Semi-struc-tured face to face interviews	Partici-pants' home South-West England, United Kingdom	20 first-time fathers 18 were White Brit-ish, 1 Asian and 1 Brazi-lian.	Needs of first-time fathers in relation to the care, support and education provided by health care professionals in the antena-tal period.	Content anal-ysis	Adequately preparing new fathers for par-enthood in advance of the birth of their baby is important, and healthcare profes-sionals can contribute to this by involving and supporting new fathers.
6.	De Mon-tigny and Lacharité 2004[53]	Critical inci-dent technique	Face to face inter-view using critical incident technique	Partici-pants' home French-speaking urban area in Western Quebec, Canada	13 first-time fathers. 92% Cau-casian	Perceptions of first-time fathers regard-ing critical moments of the immediate postpartum period.	Thematic analysis	Fathers' interactions with their babies and with nurses are signifi-cant aspects of their postpartum experi-ence. Nurses are in a crucial position to support fathers in a way that fathers feel good about them-selves, their abilities, and their infant.
7.	Dolan and Coe 2011[54]	Qualitative	In-depth face to face inter-views	Partici-pants' home United Kingdom	5 first-time fathers All White	First-time fathers' and healthcare professionals' subjective and experiential constructions of masculinity in relation to pregnancy and childbirth.	Thematic analysis	This paper demon-strates the ways in which men can find themselves margina-lised within the con-text of pregnancy and childbirth, but are still able to draw on iden-tifiable markers of masculine practice which enable them to enact a masculine form congruent with dominant masculinity.

(*Continued*)

No.	Author and year	Methodology	Method	Setting/ country	Partici-pants	Phenomena of interest	Data analysis	Authors' conclusions
8.	Finnboga-dottir *et al.* 2003[55]	Qualitative	In-depth face to face inter-views	Partici-pant's home, his place of work or at the inter-viewer's home. Multicul-tural industrial town in southern Sweden	7 expec-tant or first-time fathers	First-time and expectant fathers, expe-rience of preg-nancy	Qualitative content analy-sis	The fathers'-to-be spe-cial needs for support and encouragement during pregnancy may be as important as those of the mothers'-to-be. The caregiver needs to be as aware of and sensitive to these needs
9.	Henderson and Brouse 1991[56]	Phenomenol-ogy	Semi-struc-tured face to face interviews	Partici-pants' home Canada	22 cou-ples–22 first time fathers	Experiences of new fathers during the first 3 weeks postpartum.	Phenomeno-logical analy-sis described by Giorgi.	New fathers go through a predictable three-stage process during the transition to fatherhood–expec-tations, reality and transition to mastery.
10.	Henwood and Proc-ter 2003[57]	Qualitative longitudinal method	Semi-struc-tured face to face interviews	A venue of the partici-pant's choice (mainly at the Univer-sity of East Anglia). Norfolk, UK	30 first-time fathers All White	Men's accounts of paternal involvement during the transition to first-time fatherhood	Thematic analysis	Neither the "hege-monic masculinity" nor the "men as part of the family" per-spectives exhaust the options for reading the gratifications and tensions advanced in men's accounts of liv-ing contemporary fatherhood. Argu-ments for greater bal-ance in appreciating the problems and advantages of new fatherhood, or that men need to undergo greater change, also fail to offer points of closure.

(*Continued*)

No.	Author and year	Methodology	Method	Setting/ country	Partici-pants	Phenomena of interest	Data analysis	Authors' conclusions
11.	Ives 2014[58]	Grounded the-ory	In-depth face to face and telephone interviews	The major-ity of the face-to-face inter-views were conducted in partici-pants' home, with a small minority conducted in the author's office or home at the partici-pants' request.	11 fathers 8–White British 1–British Asian 1–Indian 1–Black Caribbean	Men's transi-tion to father-hood and the ways in which they recognise various in-ten-sion moral demand and negotiate an appropriate role for them-selves.	Grounded the-ory	If health services are going to be involved in helping men make the transition to fatherhood, they should be preparing, enabling and empow-ering them, where necessary, to engage in this moral negotia-tion, while recognizing that many, if not most, will be capable of doing this indepen-dently. This moral negotiation may lead to involvement in only some aspects of mater-nity care, or partial involvement in all aspects, and lead to many different parent-ing arrangements in a compromise that is specific to the couple and their individual circumstances.
12.	Iwata 2014[59]	Hermeneutic phenomenol-ogy	Semi struc-tured face to face interviews	All face-to-face inter-views were conducted in places at the partici-pant's request. Chiba, Japan	12 fathers	Experiences of Japanese men during the transition to fatherhood.	Hermeneutical phenomeno-logical analy-sis method	Six themes created essence of the phe-nomenon of "becom-ing a father."–1) feeling like a father; 2) realizing oneself as a husband; 3) finding the wife's pregnancy and delivery for the first time to be an impressive experience; 4) sharing time and space with one's child; 5) being aware of a change and trying to adjust to a new life; and 6) being aware of the difference between oneself and one's wife.

(*Continued*)

No.	Author and year	Methodology	Method	Setting/ country	Partici-pants	Phenomena of interest	Data analysis	Authors' conclusions
13.	Jordan 1990[60]	Grounded the-ory	Interviews	Recruited through obstetric care provi-ders USA	56 expec-tant and new first-time fathers 4 were born and raised out-side the country–2 Hispanic, 1 Euro-pean and I Asian.	Experiences of expectant and new father-hood	Grounded the-ory	Men were not recog-nized as parents but as helpmates and breadwinners which interfered with valida-tion of the reality of the pregnancy or child.
14.	Kao and Long 2004[61]	Phenomenol-ogy	Unstruc-tured inter-views	Partici-pants' house or a quiet room in the hos-pital Taiwan	14 expec-tant and new first-time fathers	Life experi-ences of first-time Taiwa-nese expectant fathers	Qualitative content analy-sis	Expectant fathers experienced pregnancy as a transition and as a development event. They encountered immense mental and lifestyle changes. First-time fathers require more support during this period.
15.	Kowlessar *et al.* 2014[62]	Interpretive phenomeno-logical approach	Semi-struc-tured inter-views	Partici-pants' house United Kingdom	10 first-time fathers	Experiences of fathers during their first year as parents	Interpretive phenomeno-logical Analy-sis	Despite increasing public awareness and socio-political changes affecting paternal par-enting culture, fathers still seem to feel undervalued and unsupported when it comes to antenatal support. The antenatal period is a critical time in which to engage with and sup-port motivated expec-tant fathers; antenatal psycho-education clas-ses can be adapted to accommodate the needs of men.

(*Continued*)

No.	Author and year	Methodology	Method	Setting/ country	Partici- pants	Phenomena of interest	Data analysis	Authors' conclusions
16.	Machin 2015[63]	Mixed methods	Semi-structured interviews	Participants' home, in Oxfordshire, UK.	15 first time fathers	Expectation and reality of involved fatherhood	Thematic analysis	Fathers are keen to fulfil the role of the involved father but they are prevented from fulfilling this desire by societal attitudes, issues relating to the development of their baby, economic barriers, a lack of support from healthcare practitioners and government policies. Fathers experience considerable tension when trying to balance their desire to be involved with their baby with the economic necessity to work. This situation is exacerbated by a lack of targeted support.
17.	Olsson *et al.* 2010[64]	Descriptive	Focus group and one-to-one interviews	Clinic settings Northern Stockholm, Sweden	8 first-time fathers (and 2 subsequent fathers)	Fathers' experience about sexual life after childbirth within the first 6 months.	Content analysis	New fathers in our study put the baby in focus in early parenthood and were prepared to postpone sex until both parties were ready, although they needed reassurance to feel at ease with the new family situation. The fathers' perceptions of sexual life extended to include all kinds of closeness and touching, and it deviated from the stereotype of male sexuality.
18.	Palsson *et al.* 2017[65]	Phenomenology	One-to-one interviews	14 interviews were carried out at respondents' homes and one in a room at the university. Southern Sweden	15 first-time fathers 9 born in Sweden, 1 in Denmark, 1 in Greece, 1 in Iran, 1 in Macedonia, 1 in Romania, and 1 in Sri Lanka.	First-time fathers experiences of their prenatal preparation in relation to challenges met	Phenomenological approach	Supporting fathers to develop strategies for life with a new baby and providing expert guidance to fruitful and accurate information may help the construction of a fatherhood identity and strengthen the fatherhood role.

(*Continued*)

No.	Author and year	Methodology	Method	Setting/ country	Partici-pants	Phenomena of interest	Data analysis	Authors' conclusions
19.	Poh *et al.* 2014[66]	Qualitative	Semi-structured interviews	Hospital–private room or wife's room Singapore	16 first-time fathers 12 Chinese, 2 Malays, 1 Indian and 1 Caucasian	First-time fathers' experiences and needs during their wives' pregnancy and childbirth in Singapore	Thematic analysis	First time fathers experienced a range of emotions from being happy and excited to feeling shocked and worried and to feeling calm. Adaptive and supportive behaviors were adopted to deal with the pregnancy changes and better support their wives. In the course of their transition to fatherhood, they also received support from their family, friends, workplaces and the health care professionals. Fathers suggested more information, timely, empathetic and professional care be given and are view to the current administrative/ logistical policies
20.	Rowe *et al.* 2013[67]	Qualitative	6 x Group Discussions, 5 x individual interviews	Royal Women's Hospital, a large tertiary teaching hospital in metropolitan Melbourne, Australia.	16 first-time fathers	Anticipated needs and preferred sources of mental health information and support of men and women expecting their first baby. in the early parenthood period.	Thematic analysis	Men regard primary family care as mother not father inclusive. Expectant parents readily anticipate realistic postnatal adjustment and need for emotional support. Increased provision of services that meet men's needs and public understanding and acceptance of Australian integrated models of primary postnatal mental health care are needed.
21.	Shirani and Henwood 2001[68]	Qualitative longitudinal method–Case study/ narrative	Semi-structured interviews	University of East Anglia or in participant's homes	2 first-time fathers	New fathers' understandings of their lives and circumstances and how these may change through time	Case study narrative analysis	In early fatherhood, involvement often remains an ideal as men are constrained by stark gender distinctions in relation to embodied experience. This is more problematic for those who anticipated equitable parenting and high involvement than for men who upheld more traditional gender distinctions.

(*Continued*)

No.	Author and year	Methodology	Method	Setting/ country	Partici- pants	Phenomena of interest	Data analysis	Authors' conclusions
22.	Taniguchi *et al.* 2015[69]	Descriptive phenomeno- logical approach	In-depth interviews	Honolulu, Hawaii	9 Japanese men living in Hono- lulu	Meaning of the lived expe- rience of childbirth and parenting of Japanese men who became fathers in a foreign coun- try.	Phenomeno- logical Analysis described by Colaizzi	Japanese men success- fully altered their transitional and authoritarian gender role to a family orien- tated social structure, under the influence of Western values, when living in foreign coun- try. By spending more time with their new family, they acknowl- edged the processes of becoming a father. The ability to adapt their expectations of fatherhood in line with Western values was enhanced by the support of co-workers, their mature age, rich educational back- ground, and the per- sonal financial resources of the male participants in the study.

Appendix IV: Study findings with illustrations and assigned credibility level

Finding 1: Renegotiating paid employment and household work or childcare work [U]

"I hope I'm around in those times when he is learning to play. There is a couple of hours each day when he wants to play and try and talk and stuff. Because I'm at work I hope I don't miss out on that too much. I don't want to come home all the time and [find] him asleep"[48(p.1015)]

Finding 2: Expectations and symbolic meaning of fatherhood [U]

"I thought as a father there would be a bond there straight away with the child. I thought it would just come naturally. I thought because he was mine I was going to be immediately attracted to this child and love would just come naturally. I was surprised I wasn't overcome with feelings for him straight away".[48(p.1017)]

Finding 3: Changing relationship with partner [U]

"The first week was great, then after that things started to get worse. I never thought that Jenny and I would have fought so much"[48(p.1018)]

Finding 4: New fathers wish to father differently from their own fathers [U]

"My father was more removed, I'm much more hands on, my father sat around and did little, my experience is very different, I change nappies, make milk and get up in the middle of the night."[49(p.74)]

"In our case the baby's mother is going back to work full time and I've decided to finish work to be with the baby. A lot of fathers spend so much time at work. Although we've got some financial worries I'd prefer this than not being with my child. I've always wanted to be with my child. I want to be around for my child in a way my father wasn't for me."[49(p.77)]

Finding 5: What it means to be 'male' [U]

"My father wasn't around much when I was growing up, he was a coal miner and had lots of bravado and machismo. Bonding with your child is important I think, you get more in touch with what it really means to be male."[49(P.74)]

Finding 6: Lack of guidance and obstacles for achieving new fatherhood [U]

"I felt shit scared. Having a new baby is a worrying time and I feel I lack a bit of confidence. .. fathers are invisible to some of these facilities– facilities don't take fathers into account."[49(p.75)]

Finding 7: Determination and sustained effort required to challenge the constructions of fatherhood [U]

"I had to take the initiative with early childhood services, I had to push to get involved–men have to take more initiative in services, but if they push they get what they want."[49(p.76)]

Finding 8: Challenges of combining new fatherhood and traditional Narratives [U]

"I'm having huge difficulty performing across all areas of my life since the baby. I have less sleep, less sexual activity and there's more strain generally. I'm stressed out and drinking too much but the baby has given me an enormous sense of there's more to life than working and having a relationship with one person. Fatherhood amplifies the meaning of life. I've organised my business to take days off during the week to be with the baby but I make it up at night."[49(p.79)]

Finding 9: Worry about being able to manage being both a good provider and a 'hands on' father [U]

"I have to fight to stop work taking over my life. I'm pretty exhausted but I want to be 'hands on' with the baby. I like teaching him, naming, climbing and I'm looking forward to teaching him footy and how ants work. I enjoy time with him but he wears me out with the toys, I feel glad to get away but I'm glad to come back. I'm much more stressed than before and worried because my work performance has dropped."[49(p.81)]

Finding 10: Engaging with Traditional Fatherhood [U]

"It's difficult with building up a new business (dentistry), but we're managing. I'm feeling pretty depressed and I get worried about the mortgage. We can't have everything at present. I've taken up smoking in the hope it will make me less stressed."[49(p.82)]

Finding 11: Not Engaging with Fatherhood [U]

One father says of himself: 'Drinking and drugs are my biggest problems.'

His partner and mother of their child formulated the problem this way:

"He's having problems adjusting to being a parent. He avoids me and the baby. I'm lonely with him in the next room drinking. He doesn't want to be here–it's the influence of his friends. He doesn't want to realise there's a third person in our lives."[49(p.84)]

Finding 12: Excitement thwarted by partner's reticence [C]

"I could see in the (pregnancy) book there was a lady there and you could see her shape changing, her body shape changing, and I wanted to see that with Esme, but she wasn't into that at all. She, she was, I don't really know, didn't want me to take a picture (of her shape changing). I felt upset, I felt a little bit "oh, come on! Come on!" And I wanted to. .. but I tried. .. I did try to, well. .. I kept it back in a way, because she kept telling me to keep it.. .. "I don't want it to be pushed, she'd say, I don't want. .. I'm doing this!" Um. .. I felt a little bit out of it too."[50(p.153)]

Finding 13: Relationship deterioration [U]

"Our relationship between the two of us has deteriorated quite drastically now. We are actually going to see Relate.. .. We go to Relate, we've been to Relate twice because Esme suggested we'd better go to Relate because we were, really we were, our relationship is not touching, not talking, nothing, nothing".[50(p.153)]

Finding 14: The focus shifting from us to him [U]

"You run around after (the baby) whereas I felt that I. .. I felt that he could. .. he would join in with my life or our life. He would be. .. I always felt that I was in this relationship with the two of us and he would be the addition to it. Whereas now I feel that he is, he is the life and we are running around after him".[50(p.154)]

Finding 15: Feeling left/pushed out [U]

"And I felt really out of the whole thing.. .. I wasn't involved in that (the pregnancy). .. I couldn't be because it wasn't in me. .. and all I could do was be there for her".[50(p.155)]

Finding 16: Wanting to cherry pick the best bits from own childhood [C]

"He wanted to parent Alfie in an optimum way and be discerning by "cherry picking" the best bits from his own experience of being fathered".[50(p.155)]

Finding 17: Wanting to bring baby up in best way [C]

"One thing I kept saying to Esme is, "I am an engineer, I can do things precisely. I could build this, this table precisely. I could screw it, but the screw has to go in a particular place and the top goes on the top and the legs go in the right directions so they are a precise science." So I wanted to get this. . .the baby, I tried to organize this baby in precise ways. Getting a baby monitor, the cot goes there, nappies can go there, that, that, that's how I (pause) treated the whole childhood thing, the baby, um, yeh".[50(p.157)]

Finding 18: Wanting to get things right [U]

"I am also worried of not getting it right. Uh. .. do I let him play on the floor with the baby gym with all the things hanging all over the top; he's interested in that. But do I, do I leave him or not? Do. .. er. .. is that not

interacting with him enough? But then, if I put him in the cot in his springy seat thing, but what am I supposed to say to him? Am I supposed just to play with him? Cuddle him? Am I supposed to? And. .. and I don't naturally sort of feel, I don't know what to do".[50(p.156)]

Finding 19: Worries about being a good enough dad [U]

"One minute he's over there being fed, then he's being winded, then he's on the floor in the baby gym, then he's up on his spring seat over there, and then he's upstairs in his cot, then he's back.. .. I don't know, and he doesn't know, you know, bouncing in the doorway, he doesn't quite know, I don't think he quite knows what he's up to, up to, because I'm worried that I'm not going to be good enough, I'm not being good enough".[50(p.156)]

Finding 20: Struggling to find a role [U]

"Ah, and I've been struggling in a way to try and find what... what is my role with this child. Um, is it to do as (Esme) does, i.e., feed him, wind him, change his nappies, bath him, clothe him? Do all those things. Everything".[50(p.157)]

Finding 21: Life's restrictions on becoming a parent [U]

"One of the feelings I have been getting is of... I can't do all the things I want to do. I found it very frustrating.. .. I've been on leave for quite a lot recently.. .. I find it very frustrating when I can't, I can't get to go and do something I want to do like. .. like the washing. .. something simple like that".[50(p.158)]

"Um. .. I didn't quite understand, I don't think I quite understood how full on babies are. Er. .. they're 100% and more. They take over your life and there's no... you don't have a life in effect really".[50(p.158)]

Finding 22: Apprehension about criticism [C]

"I enjoy that (taking Alfie to the health visitor). I enjoy getting involved with it, but... Esme. .. tends to take over. .. she seems to feel that she's the mother. .. that I can't do it properly".[50(p.157)]

Finding 23: What is expected of men is different to how I feel! [C]

"But I suppose as a man I think... it's always been a perception that we're supposed to able to handle it. .. we're supposed to be able to get on with it. We're not supposed to get upset about things. Esme only ever asks me what I am thinking... "Is everything alright?"... if I'm upset and she can see that I am physically upset... I'm... I'm crying. If I'm not crying she won't ask. I don't think she expects me to be upset or possibly even be...want to talk about something."[50(p.158)]

Finding 24: Male friends at work unable to offer support [C]

"I mentioned (at work) we were going to Relate and. .. uh. .. there tends to be a, "oh," and that's it really. You don't have much of a heart to heart with blokes. Um... but it's been nice in a way just to say something."[50(p.158)]

Finding 25: Going to work/wanting to parent [U]

"Yesterday, I didn't see him very much because there was. .. when I went to work he was in bed and when I came back he was in bed, and I didn't see him at all... probably it was an hour yesterday, which I felt wasn't sufficient connection. So when I saw him today, I felt "Look, it's Dad! Please, I'm Dad!" You know, "Please recognize me! And don't forget me!"[50(p.158)]

Finding 26: Legitimacy of paternal stress and entitlement to health professionals' support: Articulating and attributing stress [U]

"I think for me it's just–the never having any time to relax, it's just not possible. I've got a stressful job then I come home and I tend to get ... the tired, stressed baby ... I think the stress for me is just the non-stop-ness of it [51(p.5)]

Finding 27: Legitimacy of paternal stress and entitlement to health professionals' support: Symptoms and manifestation [U]

"I tend to do the typical man thing of hiding it until I can do so no longer. … I'm not the sort to wail and shout and whatever. … I probably just get grumpy and a bit snappy about stuff. That's pretty much it really".[51(p.5)]

"Yes, I could feel myself withdraw, so I wouldn't communicate as much and I would get snappy when sometimes I wouldn't do. It was something that if I was already close to it, it would be the minutest of things that sometimes would just make me lose it, not lose it, but kind of just [pause] [51(p.6)]

Finding 28: Legitimacy of paternal stress and entitlement to health professionals' support: Entitlement to health professionals' support [U]

"I think at the birth I felt a bit more like a spare part, but then again I mean they were really good with [partner], I just felt in the way sort of thing".[51(p.6)]

"[The midwife]'s interested in [partner] and knowing that I was supporting her, but not so much as me, which, they can't involve everyone, or take a responsibility for everyone … I very much felt like it's certainly not about me, this. But at the same time, I do very much appreciate the limited resources. They can't be responsible for everyone. The pregnant woman is the priority, isn't she"[51(p.6)]

Finding 29: Protecting the partnership [U]

"I struggled at times because whilst I could see of the physical effects on [partner], I couldn't understand the emotional and mental effects it was having on her, so I struggled with that, and I probably did become a bit more snappy, definitely low mood at times and struggling to sort of sleep properly, and you have a lot to think about as well so you're trying to do everything, trying to make sure that we're ready but also ready with the house and you've got so much to sort of think about"[51(p.7)]

Finding 30: Navigating fatherhood: Feeling prepared and (changing) expectations [C]

Some men reflected on the importance of changing their expectations, acknowledging that some of their stress reflected an unrealistic standard that they and their partners had set for themselves:

"Even though it wasn't by the book, but it made our lives a lot easier and that I think helped as well, not listening to what everyone told us"[51(p.8)]

Finding 31: Navigating fatherhood: Managing stress through distraction, denial and release [U]

"I'm probably the sort of bloke who actually just says, 'oh I'm quite forgetful, so I can forget I've had the worst night ever'. I just try and forget it. So that's probably my coping mechanism. It's just, trying to forget it and I generally do. And then, I guess, I've found in some ways, work quite helpful in that respect, because you can have a crazy night where you have no idea what's going on with [son's name], but I can go to work and I feel fine. I'm in control here, I know what to do. There's people who I can actually communicate with, they'll do what I ask them to do and vice versa. So I'm probably not the best example, the best person to ask, because I think I just choose to ignore. I'm probably more of an ignorer, which isn't probably that helpful for [partner]."[51(p.8)]

Finding 32: Navigating fatherhood: Strength through fatherhood as rewarding [U]

"The sleepless nights do take their to ll on you, but I don't know if it's just the way that I think … but I tend to look at the bigger picture. I just think I'm happy because she's healthy, she's smiling… So I think, well, I must be doing something half right for her to be trotting around as she does, and she's happy with me".[51(p.9)]

Finding 33: Diversity of men's support networks: Pre-existing networks–friends, family and the wider community [C]

"[At work] I can cover an awful lot of different things with them. . . And in a lot of cases, it is bloke banter. You wouldn't think that it [but] you're in the middle of an engineering workshop surrounded by blokes, and we probably spend half the day talking about babies and kids and that sort of thing. But I feel more comfortable with it, because I know that there's guys there that have had similar experiences or they know what it's like. They know how I'm feeling if I say, oh, we've had a rough night . . . Some people have had worse experiences, so you think, what we're going through is normal."[51(p.10)]

Finding 34: Diversity of men's support networks: 'Formal' peer support and opportunities to meet other fathers [C]

"I think in some ways it would be helpful before and after to make sure that dads are prepared and that they're coping and maybe even if it was just away from the mums for some people maybe, because I think some dads might find it a bit embarrassing to sort of say I don't know what I'm doing."[51(p.10)]

Finding 35: Diversity of men's support networks: Lack of information resources tailored to men [C]

"I wouldn't know if there is anything, the equivalent for dads, I've not really set out to look that specifically, I've just come at it more as being a parent . . . I absolutely would [feel comfortable using netmums] more than happy to look for help, advice, and other people's experience anywhere really".[51(p.10)]

Finding 36: Information [C]

The Haynes Baby Manual (Banks 2003) was the only publication mentioned that was aimed at men:

"Oh, I've got my Haynes manual. . .It's the Haynes manual for babies, a guy at work whose wife had a baby recommended it to us".[52(p.629)]

"Apart from this, frustration was expressed at the lack of information intended specifically for new fathers".[52(p.629)]

Finding 37: Involvement in healthcare provision [C]

"The classes are a great help, but if you're not involved in it, you're sort of put to the back of the class, so to speak. [52(p.629)]

Finding 38: Support [U]

I would have, yeah, really struggled to have anyone to go to yeah, because. . .the care is, it is very much geared towards the women. [52(p.629)]

Finding 39: Preparation for fatherhood [C]

"I would look now to wanting more information about what to do when I've actually got it. . .even little things like what clothing, when you put it to bed, getting into a routine, even the basics, really".[52(p.630)]

Finding 40: The birth [C]

"Just knowing the facts around the caesarean. It wasn't discussed, and I wasn't prepared for it. . .I wish I could've helped, know what to expect. . .that really upset me for a while".[52(p.630)]

Finding 41: Parents' relationships [C]

"You are both tired, niggling at each other, and it was probably slightly worse from what we thought. I mean, if the awareness could have been made a lot more, because no one ever really spoke to us about that other side. . .the relationship with us and the baby. We sort of sat down and we tried about two or three different ways and thought about this"[52(p.631)]

Finding 42: Fatherhood [C]

Overwhelming feelings for the baby were commonly talked about: amazement, love and a sense of great responsibility, surprise and confusion in the first few weeks. Having the baby was a completely life-changing event:

"It was all such a shock, suddenly. You're prepared but, you thought you'd prepared for it but… [52(p.631)]

Finding 43: Self and Other as Individual: Coming to terms with the physical and emotional changes during the postpartum period [U]

"The first night after the birth, it was time I lie down, I was so tired. I wasn't worried, just exhausted,"[53(p.331)]

"Taking care of my wife, and then the baby, I became so tired."[53(p.331)]

Finding 44: Self and other as a parent: coping with parental demands [U]

"Breastfeeding was what I found most difficult. I didn't know how to help, I felt useless."[53(p.333)]

"At times, my wife had difficulty breastfeeding, it made me so anxious. I just wanted the baby to drink well,"[53(p.333)]

Finding 45: Self and Other as a Couple: Maintaining Conjugal Functioning [C]

"During the hospital stay, we would take time to be together just the two of us, but the feeling of closeness was different, as if I could only see my baby's mother in her and not my spouse. It was more difficult between us, ore tense, the whole situation was more tense than easy".[53(p.333)]

Finding 46: self and other interacting with the environment: coming to terms with environmental demands [C]

"I was filling out forms on breastfeeding, nobody had explained them, yet I made some sense of them. Despite that, they kept changing the time she should breastfeed, and nobody explained why".[53(p.333)]

"It was one feeding after another; I was under the impression of having no respite. I knew it would be like that, but I still found it difficult".[53(p.333)]

Finding 47: self and other interacting with nurses: exchanging information with nurses [U]

"It was important to me that all the involvement I had had during pregnancy, childbirth and now, after, be recognized by someone else than my spouse. I wanted others to be able to recognize my involvement, by simply talking to me, by including me in conversations. I wasn't excluded by nurses, they didn't ask me to leave the room, but it was a nonverbal exclusion, by the way their body was. .. they never asked me how I felt as a dad"[53(p.334)]

Finding 48: The perceived positive relationship between being male and the ability to father children [U]

"Over the moon…I suppose it's like a man thing. It's like you feel more of a man in a way. I know it sounds a bit weird but you feel more a man…You feel everything's working and you're alright. So I was over the moon, overjoyed".[54(p.1023)]

Finding 49: Maintaining health to meet the needs of forthcoming dependents [C]

"I'm not one for boozing all the time …. But work has to come first now. I have another person to think about now… There's no two ways about it. You have to change"[54(p.1023)]

Finding 50: Childbirth perceived as a shared experience and being there [C]

"I'll be there…doing what she wants when she needs it. I'll block me ears when the foul language comes out"[54(p.1024)]

"I've seen all the movies and all the things on the TV. . .I'm going to be there to hold her hand. . .I'm sure I'll get told off!"[54(p.1024)]

Finding 51: Lack of knowledge about childbirth [U]

"It could be a bit more directed towards fathers. As regards information . . . There could be a bit more for fathers. There could be a little booklet telling you all the information you need"[54(p.1024-1025)]

"I suppose a bit nervous and frightened. Because I don't know what to expect. Well I do and I don't. But it's the first time so I don't know really what to expect until it actually happens".[54(p.1025)]

Finding 52: Aspects of the labour and birth [U]

"I want to be up the head end. . .I don't want to see any of that end at all because I don't like it, at all. . .That's the only thing I'm worried about".[54(p.1025)]

"First and foremost I hope I don't pass out. Because I don't like needles and all that sort of stuff. . .It just sends me a bit funny. . .I'm hoping I won't pass out anyway. But you never know"[54(p.1025)]

Finding 53: Disclosing personal difficulties [U]

"I have concerns and worries about things . . . But I don't have the right to share those because she's going through all this. She's going to have all this pain and everything else. . . My little worries are not really that important in the light of things".[54(p.1026)]

Finding 54: Social support [U]

"No, I'm not a person for sharing my problems with other people"[54(p.1026)]

"They just take the micky really . . . keep telling me my life as I know it is over [laughs]"[54(p.1026)]

"I tend to find that women stick together and they talk about girlie things and babies and stuff. And they tend to keep it to themselves"[54(p.1026)]

Finding 55: 'Being there': men's experiences of the labour and birth–presence during labour [C]

"I'm not the greatest person with needles and blood. . . But I was fine. I was more focused on [partner] and how she was feeling than thinking about what I was feeling"[54(p.1028)]

"They were coming and checking her every couple of hours and every time they asked me to leave. . .They'd say 'Do you mind going out I'm going to check her'. . .At the time you don't think. You do what you're told".[54(p.1029)]

Finding 56: 'Being there': men's experiences of the labour and birth–Caesarean [U]

"I just wanted it to be over with"[54(p.1029)]

"You're worried, you're anxious, you're scared. . .You don't know what's going on. You want the end product like but obviously you don't want the end product to. . .for anything to happen. . .I just wanted them to make the decision and get in there".[54(p.1029)]

Finding 57: 'Being there': men's experiences of the labour and birth–Healthcare professional [C]

"When you go in [the labour room] there is a bed and a chair. . .Your expectation is that's your chair and you don't move. It's all lined up like that. . .There is a chair next to every bed at the head. . .so like you know your place when you go in. . .But that wasn't the case . . .Every time they got me involved. . .when they took me through it. . .that was an extra for me. . .[Later in the interview] I didn't think they would get me involved as they did. . . [But] I don't think I would have walked away thinking, 'Oh I wasn't involved'. Because the emotion of seeing your daughter born. . .being there to see it would cancel that out. . .I am grateful that they did get me involved, but I don't think it would have made the day any worse if they didn't"[54(p.1029)]

Finding 58: Feeling of unreality [C]

". . ..from the beginning it was very unreal. Accordingly I walked about, was happy, told everybody and became 'high', I'm daddy just like you are! But,. . ...then it isn't so obvious when it isn't visible so it's not there. . .."[55(p.98-99)]

Finding 59: Feeling of insufficiency and inadequacy [C]

". . ..but, then you can't get away from these small nervous elements which come the whole time, I mean the moments of insecurity in the matter about exactly how one should deal with it, partly my woman's fear, on different occasions, about the pregnancy itself, but also about what is coming. How one should practically manage everything that will come afterwards and will be for the rest of my life".[55(p.100)]

". . ..then I got such a suffocating feeling about becoming a father. I got it continuously. I got a feeling that I would always have a bad conscience. If I'm doing something just for myself. . ...This is a scary thought. . .. I can't live that way, I can't give up MY life".[55(p.100)]

Finding 60: Feeling of exclusion [U]

". . .she said hallo to my wife and turned her back on me so I had to push myself forward, in front of her, so that I could shake hands with her as well. For the first five minutes she only looked at my wife and spoke to her alone 'What do you think?' (Edward) (Translators note-the singular form of 'you' was used in the Swedish)[55(p.100)]

Finding 61: Feeling of reality [C]

"I think it was enormously moving, I started to cry,. . . so it was so, soy, a human being is living here inside? It was, still only such a little thing. . .. It was the first ultrasound, I felt enormously taken. . ..Then it was in the sixth, seventh, eight month, then everything was wonderful. It's obvious to me that she is growing every day. Everything works when we go to listen to the heartbeats, to ultrasound and so on. It's like I am able to share something which is real"[55(p.100)]

Finding 62: Feeling of social changes [U]

"I have noticed that my friends and I have drifted so incredibly far apart from one another during these nine or eight months, yes it actually happens. . ... it's tedious,..but they will come back when they are in the same situation. . .hopefully".[55(p.101)]

Finding 63: Feeling of responsibility [U]

". . ..there was something in the breadwinner factor that made me feel that I should change my priorities. It happens even before the baby is born. We are building our 'nest' and making more rational decisions then before".[55(p.101)]

Finding 64: Feeling of development [U]

"I feel, that I'm growing, as a human being. Yes, it's what I'm doing, absolutely. And even as a man. That it's undeniably one kind of confirmation".[55(p.102)]

Finding 65: Expectations [U]

"It's like hitting a brick wall It's like, when they put something up, you know it's going to be there but until you actually get there you don't know what to expect".[56(p.296)]

Finding 66: Reality[C]

"But now J [wife] will take the opportunity to take a bath that she doesn't get to do during the day. Everything has to be done in shifts now. Before we could sit down and be together. You spend so much time focusing on the baby you forget about each other".[56(p.296)]

Finding 67: Transition to mastery [C]

"I noticed for the first 2 weeks he was home I was still living my same lifestyle. I go out once in a while and I'd just leave them home, and I think right then is when don't to myself, I don't feel any part of this, and the important thing I think for a father to do is to get involved. The more you get involved the more rewarding it becomes like when you get his first smile or his first laugh."[56(p.296)]

Finding 68: Expanded role of good fathers [C]

"I think being there for all their first major things is important, i.e. when they're at school, when they go to do a nativity play, going to the nativity play, not saying no I'm too busy at work or, you know, someone will video it for me, or whatever"[57(p.343)]

"You just have to put yourself second, your child comes first and yourself comes second"[86(p.343)]

"A parent who is prepared to put work second and family first, you know, the father who's prepared to do that, I think that's a good father"[86(p.343)]

"It is about. .. being understanding as to what his needs are really, and taking pleasure from watching him develop really. .. to sort of take him from being very unhappy and crying to get him laughing, getting him engaged in something by I don't know. .. making up silly rhymes about him or something taking Daniel from being unhappy to making him happy without sort of forcing him to do anything"[86(p.343)]

Finding 69: The caring father might emerge as, in fact, the bigger bloke [C]

"So I suppose if blokes are being macho whilst they have a child he is trying to prove his masculinity, I think in my mind they can prove it by being a bloody good father and true with their emotions.. .. I think it is a brilliant experience. I think a lot of men give themselves bad press on it, it is not big and macho to go down the pub and ignore your child. And it is not big and macho not want to change a nappy, you have got to get involved, and you have got to get involved now or you will lose it".[57(p.344)]

Finding 70: The pleasures, benefits and rewards of bonding with their child [U]

"I think the nicest bit is just spending time sitting around on the bed and just playing with him, and just talking to him and being talked back at, and changing his nappy when that happens as well and, you know, time looking at him and him looking at me really is the bit that I'm really enjoying"[57(p.344)]

"I do like feeding him and I do enjoy that. And after the feed he just snuggles up to you and he gets his head right into your neck, and that is lovely. And I do and if I fall asleep with him it is fantastic lying on your chest, and I do enjoy that"[57(p.344-345)]

Finding 71: Tensions and difficulties: Cash and/or care? [C]

"I feel as though my work, because my family's number one my work's got to be number one at the moment and it's that, it's that absolutely what seems to be an irreconcilable tension between the fact that you work, you are working for your family and you're trying to build a career. Because you know you want to spend, you're trying to build a career because you want the time and the quality time to spend at home. And you're building a career and as a result you're not getting that quality time to spend at home. So you're wanting both and if you don't have one you haven't got the other half, you know its um its really frustrating"[57(p.346)]

Finding 72: Whose needs? Whose values? Selflessness and autonomy in dialogue [C]

"I don't know really where it comes from, probably it is to do with the responsibility thing really. That you know she is my offspring and I probably ought to spend more time with her. .. Um I don't really know, it just seems to be as things probably ought to be ideally. .. but I don't feel very keen on, I know it's coming but I don't feel very keen to have to, er, erm, sacrifice my time basically, because I, I spend most of my time, erm,

well quite a lot of my time, sort of renovating houses and I, fiddle with practical things and, er, to be honest, babies don't interest me greatly''[57(p.347)]

Finding 73: Helping out' or 'full involvement'? Fairness, equity and decision making [U]

"I think there's an issue with me partner that, and we have touched on it, that I don't want all decisions made by her, I want it to be discussed, I want it to be fair. But obviously then what I've also got to appreciate, that if I'm a hundred miles away, as I am quite regularly, and although we can discuss things on the phone, she might have to make a decision quicker than that, in which case she makes the decision, doesn't she? So I'd be worried about not being involved in some decision-making''.[57(p.349)]

Finding 74: On the inside, looking in [U]

"She's rubbing him every day and she's got that contact and she feels him kicking all the time. So yeah, I'm removed from that, aren't I? And I think, as I said to feel that, him kicking his dad, kind of yeah, definitely gave me that physical contact that [wife] is probably quite used to. But it is quite distanced because you're not ... you're not developing the baby are you?"[58(p.1008)]

Finding 75: Present, but not participating [U]

"[W]e're expected to do a lot more these days, we're expected to be a lot more involved ... but when we are involved we're still a bit on the outskirts from what I've seen ... I don't know if it's because a lot of women don't take their partners with them, I'm not sure how other people work. It's sort of maybe they're not always used to having a man there as well, but it would've been nice to be acknowledged a little bit more, just so you feel a bit more part of it more than anything. Because you feel a bit awkward sometimes just stood there like 'Should I wait outside?' ''[58(p.1009)]

"I felt as if I shouldn't be looking kinda thing, you know, 'coz when you grow up and people pull the curtain across, it means you shouldn't be looking in there doesn't it or it's like a private area. Even though it's my wife, I'm kinda thinking, I think I might have even backed into the err, behind the curtain when I went to record off the–off the machine on the wall. But it made me feel quite uneasy to be honest''.[58(p.1009)]

Finding 76: Deference and support: a moral response [C]

"I didn't know how to help her. And I think that's frustrating. Really frustrating where you can't, you can't do anything. And, you know, you try and do everything you possibly can, you know, make sure she's eating the right things, used to sit there reading the Internet trying to, you know, what can make her better, and speak to as many people, mums and stuff, and see, you know, what can–but she was going–I think it was really hard for her, she had the worst part of it''.[58(p.1011)]

Finding 77: Feeling Like a Father [C]

"I don't feel myself as a father, or how should I put it. .. I don't feel it consciously. It was not like going up stairs and at a certain point, ''I'm a father from today!'' Such a feeling didn't come to me. It was more like going up a slope''.[59(p.162)]

Finding 78: Realizing Oneself as a Husband [C]

"I know I'm a father, but I think the most important person for me is my wife.. .. I don't think my daughter wins her in this sense.. .. I became a father, but the number one should be my wife. I like to keep this feeling in my mind. And I want my daughter to see me in this way''.[59(p.162)]

Finding 79: Finding the wife's pregnancy and delivery for the first time to be an impressive experience [C]

"I think I have done almost everything that should be done. Many of them were first experiences for me. For example, I visited a shinto shrine for praying an easy delivery, which I think is unique to Japan, and I also bought an obstetrical binder and child-related products''.[59(p.162-163)]

Finding 80: Sharing time and space with one's child [C]

"Nine months ago, it was like she suddenly started to cry. It was like an alien, or maybe a strange creature. But she started to show some gestures, or smiling, or show various expressions. I thought it was a change".[59(p.163)]

Finding 81: Being aware of a change and trying to adjust to a new life [U]

"Talking about meals, if at restaurants, I'm afraid that my daughter will cry to bother people, so I come to think of eating at home. I think our eating style has changed. But for me, it's not something inconvenient, unpleasant, nor restricted. Rather, I am enjoying the time".[59(p.163)]

Finding 82: Being aware of the difference between oneself and one's wife [U]

"Not only when it comes to breastfeeding, but also when it comes to sleeping, my daughter falls asleep more easily. Maybe she is more reliable on my wife than on me.. .. When she is crying, feeling uncomfortable, or feeling sleepy, she jumps into her mother. So when I see such a situation, I feel like, "Why don't you come to me?"[59(p.163)]

Finding 83: Grappling with the reality of the pregnancy and child [C]

"It's more in my head, I know she's pregnant, but there's nothing to feel yet (9 weeks gestation)."[60(p.13)]

"My experience is that there is a child that is supposedly happening. All we have is this test that is pretty reliable. . ..Although I was ecstatic when she showed me the test, I don't see anything happening yet. It's all from her, and I feel like I probably won't get on board. . .until I hear it from the doctor. "(7 weeks gestation)[60(p.14)]

Finding 84: Struggling for recognition as a parent from mate, co-workers, friends, family, baby, and society [U]

"It's always in reference to how [my wife] is doing, and I feel like I have resigned myself more to just responding to what they are asking and that is to say how [she] is doing as opposed to me and how I am doing. . ..I really tried to initially go out. . .and open myself up and really share. . .but, so much of the response is, 'You've just got to stick it out. This is her time.' There is no validation of the feelings. There is no recognition. I don't feel like I should deny my feelings and deny what's going on for me. The message is clear. . .'You need to focus on her.' I just haven't found anybody that is real understanding, like 'What is the experience like for you?' (37 weeks gestation) [60(p.14)]

Finding 85: Plugging away at the role-making of involved fatherhood [U]

"I feel like. . ..I'm crawling through mud. . .There is nothing clear. . ..I'm groping." (7 months post birth)

"Not having time with him I felt a lot of frustration when I had to spend time with him. I just feel like I was incapable and I couldn't cope. That was the worst feeling that I ever had in my whole life, that I wouldn't take care of my son when I had to spend time with him because I didn't know what to do" (7 weeks post birth) [60(p.15)]

Finding 86: Accomplishing an important goal in this life phase [C]

"I think if you go by the traditional Chinese way of thinking, you've reached the point of having a baby, and this is what you should be doing at this point".[61(p.63)]

Finding 87: Proving their ability as men [C]

"My first thought was 'yes! I can have a baby"[61(p.63)]

Finding 88: Symbolizing eternal love [C]

"I imagine my dad taking both my mom and my child out. ...My child will make my parents feel very happy. I already imagine what it must be like so I have already begun fostering a good family atmosphere".[61(p.63)]

Finding 89: Ending their wives' discomfort [C]

"I would like to say that soon my wife will not be suffering any longer. She's been through a hard time; before she became pregnant, and now, while she is expecting this baby. As far as I know, she has gone through many hurdles such as examinations and extracting her legs. I'm not even sure if I could do the whole thing once and she tried many times. So, she is a great women.. ... Now it's successful and she'll never have to go through any more suffering!"[61(p.63)]

Finding 90: A different mission and challenge [C]

"I don't know how to interact with my child when she's born. ...I've never been a father, so I feel quite terrified".[61(p.64)]

"I feel so panicky because I don't know what to do during the labor and delivery. I have no idea what kinds of situations I am going to meet. ...." [61(p.64)]

Finding 91: The health status of his wife and fetus [C]

"If the baby isn't healthy, I'll be worried because I don't know if it's good for a baby to grow like that"[61(p.64)]

Finding 92: Discouraged by the inapplicability of the old ways of building relationships [C]

". . ..My wife can share her feelings with me. Sometimes she says the baby is moving inside her. But, actually, as a third person, I can't imagine what that's like".[61(p.65)]

"My wife often complains that I don't care about our unborn girl. I won't listen to her heartbeat or look at her belly movements at home. The reason is, I don't know how to do that. It seems strange to me. . . .I feel it isn't necessary to do that. ...I can't see the baby so I can't make-believe all those gestures. When the baby arrives I'll be able to hold her and play with her, but right now she's not real. May be it's because . . . I can't say she doesn't really exist but she's still not actually real".[61(p.65)]

Finding 93: Adjustment [C]

". . .. . .She often complains that I download "noise" from the internet. She thinks it's not music. I feel bad when she keeps going on at me about this. I just go outside and have a smoke"[61(p.65)]

Finding 94: Preparation for fatherhood [C]

"Money is also very important. We therefore have to save as much as we can. I need to work as hard as possible. May be I'll need some investments as well".[61(p.66)]

Finding 95: Engagement [U]

"My heart feels warm when I talk to him. ... I feel like it's listening to me seriously and then he looks at me with a pair of curious eyes".[61(p.66)]

Finding 96: The wonder of fetal movement [C]

Author: If the fetal movements became strong enough to disturb the mothers' sleep and cause discomfort, however, some of the expectant fathers became worried that they would hurt their mothers. When these movements happened some of the expectant fathers talked to their unborn infants and asked them not to move so violently.

"I say 'Baby, be nice, do not move so vigorously. Your mommy might feel the pain".[61(p.67)]

Finding 97: Expanded vision [U]

"As for me, life's changed a lot, especially after experiencing this. I mean, giving birth to a new life. This has changed my viewpoint on life enormously. I've made great progress here. This small life has influenced my life in so many ways. It has changed the way I look at things, my attitudes and the way I treat people. All this is totally different from the person I used to be".[61(p.68)]

Finding 98: Experiences during pregnancy: Feelings of separation [C]

"Well before he was born I held Jenni's [wife's name] tummy, but with the best will in the world, it's just a bump that moves, like something out of a Ridley Scott film [laughs] it's weird and an extraordinary thing, no doubt about it, but I did find it different and I feel that it has to feel different with the mum as they are carrying the baby and feeling it move and grow inside, that must mean that the emotional attachment that must build must be extraordinary and I don't think that any bloke could ever understand that"[62(p.5)]

Finding 99: Fatherhood–the early days: Helplessness [U]

"You're not overly sure what you're supposed to be doing, and there are times when you have the emotion of complete helplessness."[62(p.6)]

Finding 100: Fatherhood–the early days: Trial and error parenting [U]

"Initially it is all about trial and error, at least that's how it was for us, purely trial and error … in the early days we were both sort of saying, what's wrong with him? Is it his nappy? Is it food? Is it sleep? And you go through that sort of list until you find something that makes him quiet and you go, well it was that then, and so you start to notice those signs a little more each time".[62(p.6)]

Finding 101: Fatherhood–the early days: She leads, I follow [C]

"I learned a lot from watching Jane [wife] with him, you know how to hold him, change a nappy, bathe him"[62(p.6)]

Finding 102: Fatherhood–the early days: Working together [C]

"Another thing we did was the both of us were getting up in the night to deal with her [daughter] and we soon realised that maybe I needed some more sleep so Anna [wife] would get up and do all the night feeds one night and I would do all the night feeds the next night . . .we soon got her onto the bottle so I could help out with the dream feeds while Anna slept and when she got up to do the next feed I would be able to go to sleep … working in partnership is key".[62(p.6)]

Finding 103: Fatherhood–the early days: Gaining confidence and regaining control [C]

"It was purely about experience and from that comes confidence … the more you do the more you learn and as time goes on you remember how you've dealt with things in the past … I wanted to make sure that I got stuck in … being off work for a month gave me the opportunity to get involved"[62(p.7)]

Finding 104: Changes associated with the father's Role [U]

"Our lifestyle has changed completely, in ways for the better but it is a massive struggle, it's like taking on another job almost because it has been very tiring, a lot of hard work, a lot of sleepless nights. . .the further you go back the worse it was. . .learning everything, being a dad for the first time everything is brand new."[63(p.43)]

Finding 105: Bonding and Co-parenting [U]

"I feel like our bond has grown. I think when it started off she was such a responsibility, she was such a … burden is not the word . . . she was such hard work that I think it is difficult to build a bond straight away. . .. I think your resentment of "you are making me get up at this time, making me do this again" is quite overpowering but as they get older you play with them more, see their personality . . . your bond grows."[63(p.43)]

Finding 106: Experience of the NHS and father's well-being [U]

"I think the thing that struck me was you are either treated as a couple having a child or as a mother. There is nothing focused on or no support groups for fathers. There is nothing to help you prepare for your role..."[63(p.46)]

"The support for fathering has been non-existent. I have happened to be here when health visitors came around but that is coincidental, there is nothing directed at fathers. I suppose you just get on with it. .. There isn't a dad's support network and I am lucky that I haven't needed it ... but if things had been different I think it would have been harder."[63(p.46)]

Finding 107: Worklife [U]

"After this last week away and seeing him grow and then going back to work and having 15 minutes a day with him ... it has made me realise what I am missing and it is hard because you want to be there and you want to see everything. . [The bond] has developed but because I don't get to see him as often as I would like it is a constant worry that it is not developing how I would want it to... " [63(p.50)]

Finding 108: Government and Society [U]

"I think the government or society thinks that the father is not always needed at home, that is why a system is created with only 14 days leave. We could have done with more ... it appears like the father has to be moved out of the house as soon as possible."[63(p.52)]

Finding 109: Struggling between stereotypes and personal perceptions of male sexuality during the transition to fatherhood: Societal view of sexuality [C]

"There is no one who hangs or shoots himself just because he could not make love for some time".[64(p.720)]

However, some participants had an opposing view.[64(p.720)]

"I think that men have more sexual needs, they are a little bit hornier".[64(p.720)]

Finding 110: Struggling between stereotypes and personal perceptions of male sexuality during the transition to fatherhood: Expectations on sexuality in the relationship after childbirth [U]

"Prior to the birth you think, 'a few weeks abstinence,' but now when the child is born...it can be half a year."[64(p.720)]

Finding 111: New frames for negotiating sex: Changes in the relation after childbirth [C]

"I think it is important to be there ... if the mother and child becomes one unit, it will be too much 'they' and you will be left out a bit. Then it will be tough to get it together". (to become a triad)[64(p.720)]

"Altogether, sexual life is important in a relationship. To 'K' it comes far down on the priority list. To sleep 10 hours during the night, cleaning the house, doing the laundry and...when all this is done she can start thinking about having sex [64(p.721)]

Finding 112: New frames for negotiating sex: Experience of sexual life after childbirth [C]

"It is good to try to have sex, maybe not a proper intercourse, but still... "[64(p.721)]

"she has got bigger boobs now; they are so full, tender, and awesome".[64(p.721)]

Finding 113: New frames for negotiating sex: Physical and mental alterations in partner [C]

"It [the laceration] has influenced our sex life and still does. Her skin has lost sensitivity. It causes her some discomfort. But if you compare it with the loss of desire and the constant fatigue, it is a petty hindrance, really".[64(p.721)]

"She got depressed, she was crying all the time, sex was not on the map, I focussed on and took care of our son".[64(p.721)]

Finding 114: A need to feel safe and at ease with sex in the new family Situation: Communication [US]

Authors' comments: The new fathers had different ideas about what to expect from that visit. The participants said that they thought that it would be important to talk about sex in a relaxed way and not to be stressed about it.[64(p.721)]

Finding 115: A need to feel safe and at ease with sex in the new family situation: Reassurance [US]

They experienced the visit to be quite focussed on the baby and less on the relationship and on sexuality. The men perceived that it was difficult to get accurate information about the changes in the sexual relationship after childbirth.[64(p.721)]

Finding 116: Caring for the baby in both health and illness [C]

"Every baby is different. You have to expect the unexpected and not have too many preconceptions about how the baby should behave".[65(p.88)]

Finding 117: Breastfeeding: more challenging than expected [U]

"I have to say that there I was not prepared at all but had a mental picture that it's just a matter of laying the baby to the breast and it all works. When it didn't work you stood there: aha, what the hell do we do now?"[65(p.88)]

Finding 118: Still being a couple but not as before [C]

"That there's a lot of focus on the child. . . and the partner in the relationship gets forgotten. And then sexual life. . .you need to be aware of. . .you want to know what's normal? It's important that it's still a relationship, but you can adjust the relationship a bit".[65(p.88)]

Finding 119: Being tired and bound [C]

"I don't know how you prepare yourself for sleep problems but…. (laughs). . .with sleeplessness comes irritation. It effects. . . or it can effect the relationship between me and X. . .[65(p.89)]

Finding 120: Understanding emotional reactions [C]

"You don't need to feel this great surge of happiness that everyone writes about on Facebook. I can still feel. . .yes it's happiness but it's stressful. . .I still haven't adjusted to it. . ."[65(p.89)]

Finding 121: Adjusting priorities [C]

"You've got to leave your juvenile life behind, stop running around with your mates and that. You have to change it. . .without agreeing to it. . .you've just got no choice (laughs). Now I've got someone else to think about. . ."[65(p.89)]

Finding 122: Acknowledging ones' limitations [C]

"You can't prepare yourself for everything but if this thing happens you have information and the necessary prerequisites to deal with the situation".[65(p.90)]

Finding 123: Dealing with internal and external pressures [C]

"It feels like you're being checked out by those around you. . .how you get on in different situations. . .because a lot of people have their views. It's sort of tough. . .at the same time, you don't want to do the wrong thing. . ."[65(p.90)]

Finding 124: Communicating with ones' partner [C]

"We've talked... through the whole pregnancy because things can change–what you think and believe. That way you avoid irritation and rows".[65(p.89)]

Finding 125: Forming a fatherhood identity [C]

"It's important to be prepared for the fact that there will be a lot of mother and baby time. I have to see that they are as comfortable as possible. She's got a full-time job with her (the baby), with breastfeeding, like".[65(p.89)]

"Naturally you have to help out...but it shouldn't be compulsory that you have to wash-up, shop, do the washing and clean...to relieve the one that's been at home. One has just as much right to be together with one's child..."[65(p.89)]

Finding 126: Parental groups: the good and the bad [C]

"Parents. ...get them to ask people who have three kids to join in a discussion... because they've already got the gen".[65(p.90)]

"Parental groups are an excellent way to prepare but they were too short... we hardly spoke of the time after birth".[65(p.90)]

Finding 127: Internet as an asset or a worrier [C]

"Most of the time on the internet, because ... I'm not a patient person. I want to have everything like that (clicks fingers)".[65(p.90)]

"I looked at YouTube, but you don't know to a hundred per cent which... what experience those showing the film have...Yes, if you think a bit...is it something good or can it be harmful.... "[65(p.90)]

Finding 128: The need for guidance [C]

"The midwife was very nice... and she asked: do you have any questions? But you don't have any questions if you don't know what is coming. I would know now (after birth) what to ask"[65(p.90)]

Finding 129: Information: the when and how [C]

"I learn most when someone tells me things....absolutely. So, I prefer that. But it's probably that you need to have a mixture of things....because some learn by reading and seeing."[65(p.90)]

"Information needs to be well choreographed, it needs to capture our interest, it needs to be given in a fun way. Use humor: situations can afterwards be looked at as funny or comic but when you are in it, it's like a matter of life or death".[65(p.90)]

Finding 130: Emotional changes experienced [C]

"It's... just the best experience in your life! Best experience in your life is when the baby comes out and you see that little, little thing moving there and it's still dirty and trying to look for food and you realise that that is er... that is, your baby, ya. It's amazing. Amazing feelings, you cannot describe".[66(p.783)]

"From the beginning till the end, I never show some unsure, uncertainty. Ya, what I will do and what I should appear to do (laughs!)... I am very confident at her face [in front of her] (laughs).Inside you surely got some nervous (place palm to heart)!"[66(p.783–784)]

Finding 131: Adaptive and supportive behaviors adopted [C]

"We used to meet on and off during the weekends. So I stopped going there and then even for parties, I used to attend a lot. She can't stay there for long time. She'll get pain... So, even if we're going, we just go and then

say hi and spend there 10 min and come back because she can't stay for more time. Or, if possible, I used to avoid also".[66(p.784)]

Finding 132: Social support received [C]

"Generally, it's very useful and supportive if your parents or parents-in-law uuhh... are able to contribute as in, provide advice, share their previous experience and help you to prepare along the way. It's a big encouragement and emotional support ah, from the family".[66(p.784)]

Finding 133: Suggestions for improvement to the current maternity care [C]

Provide more information

"But I think... it's much more can do la. Like encourage my wife to do the pregnant lady exercise all these things. Uuhh... for instance, he didn't really tell me where la".[66(p.785)]

"Another thing is... some of the staff were not that happy to do something, maybe. They just er... do that not very carefully. May be if you ask she... need to do something, she will just do that, just finish, not very carefully to finish".[66(p.785)]

Finding 134: Imagining life and needs with a baby: Fantasies and fears [C]

"... just encourage them, she is doing well looking after the bub. I think there is often a bit of self-doubt about whether they are doing the right thing and suggest, reassure her you are doing great".[67(p.49)]

Finding 135: Imagining life and needs with a baby: Gendered roles [C]

"I mean they [the birth classes] make the father out to be a complete idiot; you are always referred to as the bloke at the end of the bed who got you into the mess in the first place–you know what I mean? Referred to as the guilty party, but you know we're getting off lightly. We get this little present at the end and we have to do nothing for it, you know"[67(p.49)]

Finding 136: Imagining life and needs with a baby: Relationships [C]

"... now and again you're probably going to come home and walk in and it's not going to be all champagne and chocolates. You're going to have bad days and be upset or angry or something and trying to determine and learn the difference between they are not actually angry with you so don't snap back".[67(p.49–50)]

Finding 137: Preferred sources of information and support [C]

"Seeing [on the DVD] not the specialists, not the experts but the guys who were actually going through that situation without knowing much, the way we do. I could identify with those"[67(p.50)]

Finding 138: The role of primary care in mental health care for new parents: Routine enquiry [C]

Authors interpretation: health professionals' role should be limited to giving information: 'they've got an obligation to let you know information' and suspicion that these health professionals are 'not qualified to emotionally help you' (M1), because their training prepares them to treat physical not mental illnesses: 'I don't know how much of their training would be on the emotional side of things' (M2).[67(p.50-51)]

Finding 139: The role of primary care in mental health care for new parents: Screening questionnaires [C]

Men's willingness would depend on how long the form was: 'where there aren't too many boxes to tick, three or four. .. ten's a struggle' (M4); how they were feeling at the time; 'the value you think you are going to get from it at the time' (M4); and whether there were competing priorities.[67(p.51)]

Finding 140: Feelings of exclusion [C]

"Um things that I find difficult is not being able to stop that, not being able to stop her crying... That's hard because I feel quite helpless you know when she is really screaming her head off. Then Tanya usually has to

breastfeed her or sometimes she just likes to nurse on Tanya, on Tanya's breast just to fall off to sleep sort of thing. So that is difficult not being able to do anything about that, I can't feed her but I can't do anything''.[68(p.21)]

Finding 141: Good father and father involvement [C]

"I feel that there is more to come. As Imogen develops I will develop my ability to be a father that will grow and evolve and develop with her''.[68(p.21)]

"I'm looking forward to the whole experience of being a father having someone that relies on you, is dependent on you ... it's going to be really good to sort of look after it, take care and sort of bring it into the world ... "[68(p.23)]

Finding 142: Making Active Efforts in Preparation for Childbirth in a Foreign Country [C]

Author: They [expectant fathers] also became more aware and concerned about the changes that they observed taking place in their wives.

"Thinking of my unborn baby, it was very important to focus on my wife's health. This was a natural way of thinking, wasn't it? I picked up natural foods and pure drinks for my wife for the first time''.[69(p.43)]

Finding 143: Challenges in Pregnancy, Childbirth, and Parenting as Husbands/Partners [C]

"For men, we don't feel any pain and don't experience the difficulty of labor. Thus, we are apt to become less involved with pregnancy and childbirth. We also only need to observe how her body will change because we do not have to experience it ourselves''.[69(p.43)]

Finding 144: Challenges in Transition to Parenthood [C]

"I think that the relationship between a baby and a father is not a close bond. I can't feel any fetal movements myself. I also can't breastfeed my baby. That's why I would not have any connection with my baby if I did not take care of her. The more I take care of my baby, the more I feel like a father''.[69(p.43)]

Appendix V: Study findings and aggregated categories

Findings	Categories
Finding 5: What it means to be "male" [U] "My father wasn't around much when I was growing up, he was a coal miner and had lots of bravado and machismo. Bonding with your child is important I think, you get more in touch with what it really means to be male."[49 (p.74)] Finding 48: The perceived positive relationship between being male and the ability to father children [U] "Over the moon…I suppose it's like a man thing. It's like you feel more of a man in a way. I know it sounds a bit weird but you feel more a man…You feel everything's working and you're alright. So I was over the moon, overjoyed".[54(p.1023)] Finding 64: Feeling of development [U] "I feel, that I'm growing, as a human being. Yes, it's what I'm doing, absolutely. And even as a man. That it's undeniably one kind of confirmation".[53(p.102)] Finding 69: The caring father might emerge as, in fact, the bigger bloke [C] "So I suppose if blokes are being macho whilst they have a child he is trying to prove his masculinity, I think in my mind they can prove it by being a bloody good father and true with their emotions.. .. I think it is a brilliant experience. I think a lot of men give themselves bad press on it, it is not big and macho to go down the pub and ignore your child. And it is not big and macho not want to change a nappy, you have got to get involved, and you have got to get involved now or you will lose it".[57(p.344)] Finding 86: Accomplishing an important goal in this life phase [C] "I think if you go by the traditional Chinese way of thinking, you've reached the point of having a baby, and this is what you should be doing at this point".[61(p.63)] Finding 87: Proving their ability as men [C] "My first thought was 'yes! I can have a baby"[61(p.63)]	Being a father, feeling more of a man
Finding 49: Maintaining health to meet the needs of forthcoming dependents [C] "I'm not one for boozing all the time …. But work has to come first now. I have another person to think about now… There's no two ways about it. You have to change"[54(p.1023)] Finding 63: Feeling of responsibility [U] "…there was something in the breadwinner factor that made me feel that I should change my priorities. It happens even before the baby is born. We are building our 'nest' and making more rational decisions then before".[53(p.101)] Finding 88: Symbolizing eternal love [C] "I imagine my dad taking both my mom and my child out….My child will make my parents feel very happy. I already imagine what it must be like so I have already begun fostering a good family atmosphere".[61(p.63)] Finding 94: Preparation for fatherhood [C] "Money is also very important. We therefore have to save as much as we can. I need to work as hard as possible. May be I'll need some investments as well".[61(p.66)] Finding 97: Expanded vision [U] "As for me, life's changed a lot, especially after experiencing this. I mean, giving birth to a new life. This has changed my viewpoint on life enormously. I've made great progress here. This small life has influenced my life in so many ways. It has changed the way I look at things, my attitudes and the way I treat people. All this is totally different from the person I used to be".[61(p.68)] Finding 104: Changes associated with the father's Role [U] "Our lifestyle has changed completely, in ways for the better but it is a massive struggle, it's like taking on another job almost because it has been very tiring, a lot of hard work, a lot of sleepless nights…the further you go back the worse it was…learning everything, being a dad for the first time everything is brand new."[63(p.43)] Finding 121: Adjusting priorities [C] "You've got to leave your juvenile life behind, stop running around with your mates and that. You have to change it…without agreeing to it…you've just got no choice (laughs). Now I've got someone else to think about…"[95(p.89)] Finding 130: Emotional changes experienced [C] "It's… just the best experience in your life! Best experience in your life is when the baby comes out and you see that little, little thing moving there and it's still dirty and trying to look for food and you realise that that is er… that is, your baby, ya. It's amazing. Amazing feelings, you cannot describe".[66(p -783)] "From the beginning till the end, I never show some unsure, uncertainty. Ya, what I will do and what I should appear to do (laughs!)… I am very confident at her face [in front of her] (laughs).Inside you surely got some nervous (place palm to heart)!"[66(p -783-784)]	Changed priorities, responsibility and expanded vision

(*Continued*)

Findings	Categories
Finding 4: New fathers wish to father differently from their own fathers [U] "My father was more removed, I'm much more hands on, my father sat around and did little, my experience is very different, I change nappies, make milk and get up in the middle of the night."[49(p.74)] Finding 9: Worry about being able to manage being both a good provider and a 'hands on' father [U] "I have to fight to stop work taking over my life. I'm pretty exhausted but I want to be 'hands on' with the baby. I like teaching him, naming, climbing and I'm looking forward to teaching him footy and how ants work. I enjoy time with him but he wears me out with the toys, I feel glad to get away but I'm glad to come back. I'm much more stressed than before and worried because my work performance has dropped."[49(p.81)] Finding 16: Wanting to cherry pick the best bits from own childhood [C] "He wanted to parent Alfie in an optimum way and be discerning by "cherry picking" the best bits from his own experience of being fathered"[50(p.153)] Finding 17: Wanting to bring baby up in best way [C] "One thing I kept saying to Esme is, "I am an engineer, I can do things precisely. I could build this, this table precisely. I could screw it, but the screw has to go in a particular place and the top goes on the top and the legs go in the right directions so they are a precise science." So I wanted to get this. . .the baby, I tried to organize this baby in precise ways. Getting a baby monitor, the cot goes there, nappies can go there, that, that, that's how I (pause) treated the whole childhood thing, the baby, um, yeh"[50(p.157)] Finding 18: Wanting to get things right [U] "I am also worried of not getting it right. Uh. .. do I let him play on the floor with the baby gym with all the things hanging all over the top; he's interested in that. But do I, do I leave him or not? Do. .. er. .. is that not interacting with him enough? But then, if I put him in the cot in his springy seat thing, but what am I supposed to say to him? Am I supposed just to play with him? Cuddle him? Am I supposed to? And. .. and I don't naturally sort of feel, I don't know what to do"[50(p.156)] Finding 19: Worries about being a good enough dad [U] "One minute he's over there being fed, then he's being winded, then he's on the floor in the baby gym, then he's up on his spring seat over there, and then he's upstairs in his cot, then he's back... .. I don't know, and he doesn't know, you know, bouncing in the doorway, he doesn't quite know, I don't think he quite knows what he's up to, up to, because I'm worried that I'm not going to be good enough, I'm not being good enough"[50(p.156)] Finding 68: Expanded role of good fathers [C] "I think being there for all their first major things is important, i.e. when they're at school, when they go to do a nativity play, going to the nativity play, not saying no I'm too busy at work or, you know, someone will video it for me, or whatever [57(p.343)] "You just have to put yourself second, your child comes first and yourself comes second"[86(p.343)] "A parent who is prepared to put work second and family first, you know, the father who's prepared to do that, I think that's a good father"[86(p.343)] "It is about... being understanding as to what his needs are really, and taking pleasure from watching him develop really. .. to sort of take him from being very unhappy and crying to get him laughing, getting him engaged in something by I don't know. .. making up silly rhymes about him or something taking Daniel from being unhappy to making him happy without sort of forcing him to do anything"[86(p.343)] Finding 123: Dealing with internal and external pressures [C] "It feels like you're being checked out by those around you...how you get on in different situations...because a lot of people have their views. It's sort of tough...at the same time, you don't want to do the wrong thing..."[65(p.90)] Finding 141: Good father and father involvement [C] "I feel that there is more to come. As Imogen develops I will develop my ability to be a father that will grow and evolve and develop with her".[68(p -21)] "I'm looking forward to the whole experience of being a father having someone that relies on you, is dependent on you . . . it's going to be really good to sort of look after it, take care and sort of bring it into the world . . ."[68(p -21)]	Being a good enough dad and getting it right

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Findings	Categories
Finding 1: Renegotiating paid employment and household work or childcare work [U] "I hope I'm around in those times when he is learning to play. There is a couple of hours each day when he wants to play and try and talk and stuff. Because I'm at work I hope I don't miss out on that too much. I don't want to come home all the time and [find] him asleep".[48(p.1015)] Finding 25: Going to work/wanting to parent [U] "Yesterday, I didn't see him very much because there was. .. when I went to work he was in bed and when I came back he was in bed, and I didn't see him at all. .. probably it was an hour yesterday, which I felt wasn't sufficient connection. So when I saw him today, I felt "Look, it's Dad! Please, I'm Dad!" You know, "Please recognize me! And don't forget me!"[50(p.158)] Finding 71: Tensions and difficulties: Cash and/or care? [C] "I feel as though my work, because my family's number one my work's got to be number one at the moment and it's that, it's that absolutely what seems to be an irreconcilable tension between the fact that you work, you are working for your family and you're trying to build a career. Because you know you want to spend, you're trying to build a career because you want the time and the quality time to spend at home. And you're building a career and as a result you're not getting that quality time to spend at home. So you're wanting both and if you don't have one you haven't got the other half, you know its um its really frustrating"[57(p.346)] Finding 107: Worklife [U] "After this last week away and seeing him grow and then going back to work and having 15 minutes a day with him … it has made me realise what I am missing and it is hard because you want to be there and you want to see everything… [The bond] has developed but because I don't get to see him as often as I would like it is a constant worry that it is not developing how I would want it to… " [63(p.30)]	Challenges of balancing work and the role of fatherhood
Finding 3: Changing relationship with partner [U] "The first week was great, then after that things started to get worse. I never thought that Jenny and I would have fought so much".[48(p.1018)] Finding 13: Relationship deterioration [U] "Our relationship between the two of us has deteriorated quite drastically now. We are actually going to see Relate.. .. We go to Relate, we've been to Relate twice because Esme suggested we'd better go to Relate because we were, really we were, our relationship is not touching, not talking, nothing, nothing"[50(p.153)] Finding 45: Self and other as a couple maintaining conjugal functioning [C] "During the hospital stay, we would take time to be together just the two of us, but the feeling of closeness was different, as if I could only see my baby's mother in her and not my spouse. It was more difficult between us, ore tense, the whole situation was more tense than easy".[53(p.333)]	Deterioration in couple relationship
Finding 109: Struggling between stereotypes and personal perceptions of male sexuality during the transition to fatherhood: Societal view of sexuality [C] "There is no one who hangs or shoots himself just because he could not make love for some time".[64(p.720)] However, some participants had an opposing view. "I think that men have more sexual needs, they are a little bit hornier".[64(p.720)] Finding 110: Struggling between stereotypes and personal perceptions of male sexuality during the transition to fatherhood: Expectations on sexuality in the relationship after childbirth [U] "Prior to the birth you think, 'a few weeks abstinence,' but now when the child is born…it can be half a year.'"[64(p.720)] Finding 111: New frames for negotiating sex: Changes in the relation after childbirth [C] "I think it is important to be there … if the mother and child becomes one unit, it will be too much 'they' and you will be left out a bit. Then it will be tough to get it together". (to become a triad) [64(p.720)] "Altogether, sexual life is important in a relationship. To 'K' it comes far down on the priority list. To sleep 10 hours during the night, cleaning the house, doing the laundry and…when all this is done she can start thinking about having sex [64(p.721)] Finding 112: New frames for negotiating sex: Experience of sexual life after childbirth [C] "It is good to try to have sex, maybe not a proper intercourse, but still…" [64(p.721)] "she has got bigger boobs now; they are so full, tender, and awesome".[64(p.721)] Finding 113: New frames for negotiating sex: Physical and mental alterations in partner [C] "It [the laceration] has influenced our sex life and still does. Her skin has lost sensitivity. It causes her some discomfort. But if you compare it with the loss of desire and the constant fatigue, it is a petty hindrance, really". "She got depressed, she was crying all the time, sex was not on the map, I focussed on and took care of our son".[64(p.721)]	Changes to sexual relationship

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Findings	Categories
Finding 44: self and other as a parent: coping with parental demands [U] "Breastfeeding was what I found most difficult. I didn't know how to help, I felt useless." "At times, my wife had difficulty breastfeeding, it made me so anxious. I just wanted the baby to drink well."[53(p.333)] Finding 46: self and other interacting with the environment: coming to terms with environmental demands [C] "I was filling out forms on breastfeeding, nobody had explained them, yet I made some sense of them. Despite that, they kept changing the time she should breastfeed, and nobody explained why". "It was one feeding after another; I was under the impression of having no respite. I knew it would be like that, but I still found it difficult."[53(p.333)] Finding 117: Breastfeeding: more challenging than expected [U] "I have to say that there I was not prepared at all but had a mental picture that it's just a matter of laying the baby to the breast and it all works. When it didn't work you stood there: aha, what the hell do we do now?"[65(p.88)]	Breastfeeding: a difficult experience
Finding 2: Expectations and symbolic meaning of fatherhood [U] "I thought as a father there would be a bond there straight away with the child. I thought it would just come naturally. I thought because he was mine I was going to be immediately attracted to this child and love would just come naturally. I was surprised I wasn't overcome with feelings for him straight away"[48(p.1017)]. Finding 58: Feeling of unreality [C] "....from the beginning it was very unreal. Accordingly I walked about, was happy, told everybody and became 'high', I'm daddy just like you are! But,.....then it isn't so obvious when it isn't visible so it's not there....."[55(p.98-99)] Finding 74: On the inside, looking in [U] "She's rubbing him every day and she's got that contact and she feels him kicking all the time. So yeah, I'm removed from that, aren't I? And I think, as I said to feel that, him kicking his dad, kind of yeah, definitely gave me that physical contact that [wife] is probably quite used to. But it is quite distanced because you're not ... you're not developing the baby are you?"[58(p.1008)] Finding 77: Feeling like a father [C] "I don't feel myself as a father, or how should I put it. .. I don't feel it consciously. It was not like going up stairs and at a certain point, "I'm a father from today!" Such a feeling didn't come to me. It was more like going up a slope".[59(p.162)] Finding 82: Being aware of the difference between oneself and one's wife [U] "Not only when it comes to breastfeeding, but also when it comes to sleeping, my daughter falls asleep more easily. Maybe she is more reliable on my wife than on me... When she is crying, feeling uncomfortable, or feeling sleepy, she jumps into her mother. So when I see such a situation, I feel like, "Why don't you come to me?"[59(p.165)] Finding 83: Grappling with the reality of the pregnancy and child [C] "It's more in my head, I know she's pregnant, but there's nothing to feel yet (9 weeks gestation)." "My experience is that there is a child that is supposedly happening. All we have is this test that is pretty reliable....Although I was ecstatic when she showed me the test, I don't see anything happening yet. It's all from her, and I feel like I probably won't get on board...until I hear it from the doctor. "(7 weeks gestation) [60(p.13)] Finding 92: Discouraged by the inapplicability of the old ways of building relationships [C] "....My wife can share her feelings with me. Sometimes she says the baby is moving inside her. But, actually, as a third person, I can't imagine what that's like".[61(p.65)] "My wife often complains that I don't care about our unborn girl. I won't listen to her heartbeat or look at her belly movements at home. The reason is, I don't know how to do that. It seems strange to me. ...I feel it isn't necessary to do that. ...I can't see the baby so I can't make-believe all those gestures. When the baby arrives I'll be able to hold her and play with her, but right now she's not real. May be it's because ... I can't say she doesn't really exist but she's still not actually real".[61(p.65)] Finding 98: Experiences during pregnancy: Feelings of separation [C] "Well before he was born I held Jenni's [wife's name] tummy, but with the best will in the world, it's just a bump that moves, like something out of a Ridley Scott film [laughs] it's weird and an extraordinary thing, no doubt about it, but I did find it different and I feel that it has to feel different with the mum as they are carrying the baby and feeling it move and grow inside, that must mean that the emotional attachment that must build must be extraordinary and I don't think that any bloke could ever understand that"[62(p.5)] Finding 144: Challenges in transition to parenthood [C] "I think that the relationship between a baby and a father is not a close bond. I can't feel any fetal movements myself. I also can't breastfeed my baby. That's why I would not have any connection with my baby if I did not take care of her. The more I take care of my baby, the more I feel like a father".[63(p.43)]	Struggles with bonding with the baby during pregnancy and the early days

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Findings	Categories
Finding 40: The birth [C] "Just knowing the facts around the caesarean. It wasn't discussed, and I wasn't prepared for it…I wish I could've helped, know what to expect…that really upset me for a while".[52(p.630)] Finding 42: Fatherhood [C] "It was all such a shock, suddenly. You're prepared but, you thought you'd prepared for it but…"[52(p.631)] Finding 59: Feeling of insufficiency and inadequacy [C] "….but, then you can't get away from these small nervous elements which come the whole time, I mean the moments of insecurity in the matter about exactly how one should deal with it, partly my woman's fear, on different occasions, about the pregnancy itself, but also about what is coming. How one should practically manage everything that will come afterwards and will be for the rest of my life".[55(p.100)] "….then I got such a suffocating feeling about becoming a father. I got it continuously. I got a feeling that I would always have a bad conscience. If I'm doing something just for myself…..This is a scary thought…. I can't live that way, I can't give up MY life".[55(p.100)] Finding 65: Expectations [U] "It's like hitting a brick wall It's like, when they put something up, you know it's going to be there but until you actually get there you don't know what to expect".[56(p.296)] Finding 90: A different mission and challenge [C] "I don't know how to interact with my child when she's born….I've never been a father, so I feel quite terrified".[61(p.64)] "I feel so panicky because I don't know what to do during the labor and delivery. I have no idea what kinds of situations I am going to meet…."[61(p.63)] Finding 143: Challenges in pregnancy, childbirth, and parenting as husbands/partners [C] "For men, we don't feel any pain and don't experience the difficulty of labor. Thus, we are apt to become less involved with pregnancy and childbirth. We also only need to observe how her body will change because we do not have to experience it ourselves".[69(p.43)]	Not knowing what to expect and fear of the unknown
Finding 76: Deference and support: a moral response [C] "I didn't know how to help her. And I think that's frustrating. Really frustrating where you can't, you can't do anything. And, you know, you try and do everything you possibly can, you know, make sure she's eating the right things, used to sit there reading the Internet trying to, you know, what can make her better, and speak to as many people, mums and stuff, and see, you know, what can–but she was going–I think it was really hard for her, she had the worst part of it".[58(p.1011)] Finding 85: Plugging away at the role-making of involved fatherhood [U] "I feel like…I'm crawling through mud…There is nothing clear….I'm groping." (7 months post birth)[60(p.15)] "Not having time with him I felt a lot of frustration when I had to spend time with him. I just feel like I was incapable and I couldn't cope. That was the worst feeling that I ever had in my whole life, that I wouldn't take care of my son when I had to spend time with him because I didn't know what to do" (7 weeks post birth)[60(p.15)] Finding 99: Fatherhood–the early days: Helplessness [U] "You're not overly sure what you're supposed to be doing, and there are times when you have the emotion of complete helplessness."[62(p.6)] Finding 140: Feelings of exclusion [C] "Um things that I find difficult is not being able to stop that, not being able to stop her crying … That's hard because I feel quite helpless you know when she is really screaming her head off. Then Tanya usually has to breastfeed her or sometimes she just likes to nurse on Tanya, on Tanya's breast just to fall off to sleep sort of thing. So that is difficult not being able to do anything about that, I can't feed her but I can't do anything".[68(p.21)]	Feelings of helplessness

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Findings	Categories
Finding 12: Excitement thwarted by partner's reticence [C] "I could see in the (pregnancy) book there was a lady there and you could see her shape changing, her body shape changing, and I wanted to see that with Esme, but she wasn't into that at all. She, she was, I don't really know, didn't want me to take a picture (of her shape changing). I felt upset, I felt a little bit "oh, come on! Come on!" And I wanted to. .. but I tried. .. I did try to, well. .. I kept it back in a way, because she kept telling me to keep it.. .. "I don't want it to be pushed, she'd say, I don't want. .. I'm doing this!" Um. .. I felt a little bit out of it too."[50(p.153)] Finding 14: The focus shifting from us to him [U] "You run around after (the baby) whereas I felt that I. .. I felt that he could... he would join in with my life or our life. He would be. .. I always felt that I was in this relationship with the two of us and he would be the addition to it. Whereas now I feel that he is, he is the life and we are running around after him".[50(p.154)] Finding 15: Feeling left/pushed out [U] "And I felt really out of the whole thing.... I wasn't involved in that (the pregnancy). .. I couldn't be because it wasn't in me. .. and all I could do was be there for her"[50(p.155)] Finding 20: Struggling to find a role [U] "Ah, and I've been struggling in a way to try and find what. .. what is my role with this child. Um, is it to do as (Esme) does, i.e., feed him, wind him, change his nappies, bath him, clothe him? Do all those things. Everything".[50(p.157)] Finding 22: Apprehension about criticism [C] "I enjoy that (taking Alfie to the health visitor). I enjoy getting involved with it, but. .. Esme. .. tends to take over. .. she seems to feel that she's the mother. .. that I can't do it properly"[50(p.157)]. Finding 73: "Helping out" or "full involvement"? Fairness, equity and decision making [U] "I think there's an issue with me partner that, and we have touched on it, that I don't want all decisions made by her, I want it to be discussed, I want it to be fair. But obviously then what I've also got to appreciate, that if I'm a hundred miles away, as I am quite regularly, and although we can discuss things on the phone, she might have to make a decision quicker than that, in which case she makes the decision, doesn't she? So I'd be worried about not being involved in some decision-making".[57(p.349)]	Pushed out of the relationship and struggling to find a role
Finding 52: Aspects of the labour and birth [U] "I want to be up the head end...I don't want to see any of that end at all because I don't like it, at all...That's the only thing I'm worried about".[54(p.1025)]. "First and foremost I hope I don't pass out. Because I don't like needles and all that sort of stuff...It just sends me a bit funny...I'm hoping I won't pass out anyway. But you never know"[54(p.1025)]. Finding 56: "Being there": men's experiences of the labour and birth–Caesarean [U] "I just wanted it to be over with"[54(p.1029)] "You're worried, you're anxious, you're scared...You don't know what's going on. You want the end product like but obviously you don't want the end product to...for anything to happen...I just wanted them to make the decision and get in there".[54(p.1029)]	Fears relating to labor and birth
Finding 50: Childbirth perceived as a shared experience and being there [C] "I'll be there...doing what she wants when she needs it. I'll block me ears when the foul language comes out". "I've seen all the movies and all the things on the TV...I'm going to be there to hold her hand...I'm sure I'll get told off!"[54(p.1024)]. Finding 78: Realizing oneself as a husband [C] "I know I'm a father, but I think the most important person for me is my wife.... I don't think my daughter wins her in this sense.... I became a father, but the number one should be my wife. I like to keep this feeling in my mind. And I want my daughter to see me in this way".[59(p.142)] Finding 79: Finding the wife's pregnancy and delivery for the first time to be an impressive experience [C] "I think I have done almost everything that should be done. Many of them were first experiences for me. For example, I visited a shinto shrine for praying an easy delivery, which I think is unique to Japan, and I also bought an obstetrical binder and child-related products".[59(p.142-143)] Finding 89: Ending their wives' discomfort [C] "I would like to say that soon my wife will not be suffering any longer. She's been through a hard time; before she became pregnant, and now, while she is expecting this baby. As far as I know, she has gone through many hurdles such as examinations and extracting her legs. I'm not even sure if I could do the whole thing once and she tried many times. So, she is a great women.... Now it's successful and she'll never have to go through any more suffering!"[61(p.63)]	

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Findings	Categories
Finding 91: The health status of his wife and fetus [C] "If the baby isn't healthy, I'll be worried because I don't know if it's good for a baby to grow like that"[63(p.64)] Finding 96: The wonder of fetal movement [C] Author: If the fetal movements became strong enough to disturb the mothers' sleep and cause discomfort, however, some of the expectant fathers became worried that they would hurt their mothers. When these movements happened some of the expectant fathers talked to their unborn infants and asked them not to move so violently. "I say 'Baby, be nice, do not move so vigorously. Your mommy might feel the pain".[61(p.67)] Finding 134: Imagining life and needs with a baby: Fantasies and fears [C] "… just encourage them, she is doing well looking after the bub. I think there is often a bit of self-doubt about whether they are doing the right thing and suggest, reassure her you are doing great".[67(p.49)] Finding 142: Making active efforts in preparation for childbirth in a foreign country [C] Author: They [expectant fathers] also became more aware and concerned about the changes that they observed taking place in their wives. "Thinking of my unborn baby, it was very important to focus on my wife's health. This was a natural way of thinking, wasn't it? I picked up natural foods and pure drinks for my wife for the first time".[69(p.43)]	Concerns about their partner's and baby's wellbeing
Finding 8: Challenges of combining new fatherhood and traditional Narratives [U] "I'm having huge difficulty performing across all areas of my life since the baby. I have less sleep, less sexual activity and there's more strain generally. I'm stressed out and drinking too much but the baby has given me an enormous sense of there's more to life than working and having a relationship with one person. Fatherhood amplifies the meaning of life. I've organised my business to take days off during the week to be with the baby but I make it up at night."[49(p.79)] Finding 21: Life's restrictions on becoming a parent [U] "One of the feelings I have been getting is of… I can't do all the things I want to do. I found it very frustrating.… I've been on leave for quite a lot recently.. .. I find it very frustrating when I can't, I can't get to go and do something I want to do like… like the washing… something simple like that".[50(p.158)]. "Um. .. I didn't quite understand, I don't think I quite understood how full on babies are. Er… they're 100% and more. They take over your life and there's no… you don't have a life in effect really"[48(p.138)]. Finding 26: Legitimacy of paternal stress and entitlement to health professionals' support: Articulating and attributing stress [U] "I think for me it's just–the never having any time to relax, it's just not possible. I've got a stressful job then I come home and I tend to get … the tired, stressed baby … I think the stress for me is just the non-stop-ness of it [51(p.5)] Finding 29: Protecting the partnership [U] "I struggled at times because whilst I could see of the physical effects on [partner], I couldn't understand the emotional and mental effects it was having on her, so I struggled with that, and I probably did become a bit more snappy, definitely low mood at times and struggling to sort of sleep properly, and you have a lot to think about as well so you're trying to do everything, trying to make sure that we're ready but also ready with the house and you've got so much to sort of think about [52(p.7)] Finding 43: Self and other as individual: Coming to terms with the physical and emotional changes during the postpartum period [U] "The first night after the birth, it was time I lie down, I was so tired. I wasn't worried, just exhausted,"[42(p.331)] "Taking care of my wife, and then the baby, I became so tired."[53(p.331)] Finding 72: Whose needs? Whose values? Selflessness and autonomy in dialogue [C] "I don't know really where it comes from, probably it is to do with the responsibility thing really. That you know she is my offspring and I probably ought to spend more time with her. .. Um I don't really know, it just seems to be as things probably ought to be ideally. .. but I don't feel very keen on, I know it's coming but I don't feel very keen to have to, er, erm, sacrifice my time basically, because I, I spend most of my time, erm, well quite a lot of my time, sort of renovating houses and I, fiddle with practical things and, er, to be honest, babies don't interest me greatly"[57(p.347)] Finding 119: Being tired and bound [C] "I don't know how you prepare yourself for sleep problems but… .. (laughs)…with sleeplessness comes irritation. It effects… or it can effect the relationship between me and X… [65(p.89)] Finding 120: Understanding emotional reactions [C] "You don't need to feel this great surge of happiness that everyone writes about on Facebook. I can still feel…yes it's happiness but it's stressful…I still haven't adjusted to it…"[65(p.89)]	Restrictions, frustrations and stresses of new fatherhood

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Findings	Categories
Finding 10: Engaging with traditional fatherhood [U] "It's difficult with building up a new business (dentistry), but we're managing. I'm feeling pretty depressed and I get worried about the mortgage. We can't have everything at present. I've taken up smoking in the hope it will make me less stressed."[49(p.82)] Finding 11: Not engaging with fatherhood [U] One father says of himself: 'Drinking and drugs are my biggest problems.' His partner and mother of their child formulated the problem this way: "He's having problems adjusting to being a parent. He avoids me and the baby. I'm lonely with him in the next room drinking. He doesn't want to be here–it's the influence of his friends. He doesn't want to realise there's a third person in our lives."[49(p.84)] Finding 23: What is expected of men is different to how I feel! [C] "But I suppose as a man I think. .. it's always been a perception that we're supposed to able to handle it. .. we're supposed to be able to get on with it. We're not supposed to get upset about things. Esme only ever asks me what I am thinking. .. "Is everything alright?". .. if I'm upset and she can see that I am physically upset. .. I'm. .. I'm crying. If I'm not crying she won't ask. I don't think she expects me to be upset or possibly even be. . .want to talk about something."[50(p.158)]. Finding 27: Legitimacy of paternal stress and entitlement to health professionals' support: Symptoms and manifestation [U] "I tend to do the typical man thing of hiding it until I can do so no longer. ... I'm not the sort to wail and shout and whatever. ... I probably just get grumpy and a bit snappy about stuff. That's pretty much it really". [51(p.5)] "Yes, I could feel myself withdraw, so I wouldn't communicate as much and I would get snappy when sometimes I wouldn't do. It was something that if I was already close to it, it would be the minutest of things that sometimes would just make me lose it, not lose it, but kind of just [pause] [51(p.6)] Finding 31: Navigating fatherhood: Managing stress through distraction, denial and release [U] "I'm probably the sort of bloke who actually just says, 'oh I'm quite forgetful, so I can forget I've had the worst night ever'. I just try and forget it. So that's probably my coping mechanism. It's just, trying to forget it and I generally do. And then, I guess, I've found in some ways, work quite helpful in that respect, because you can have a crazy night where you have no idea what's going on with [son's name], but I can go to work and I feel fine. I'm in control here, I know what to do. There's people who I can actually communicate with, they'll do what I ask them to do and vice versa. So I'm probably not the best example, the best person to ask, because I think I just choose to ignore. I'm probably more of an ignorer, which isn't probably that helpful for [partner]."[51(p.8)] Finding 53: Disclosing personal difficulties [U] "I have concerns and worries about things ... But I don't have the right to share those because she's going through all this. She's going to have all this pain and everything else... My little worries are not really that important in the light of things". [54(p.1026)] Finding 93: Adjustment [C] "..... ...She often complains that I download "noise" from the internet. She thinks it's not music. I feel bad when she keeps going on at me about this. I just go outside and have a smoke"[61(p.65)]	Coping mechanisms
Finding 24: Male friends at work unable to offer support [C] "I mentioned (at work) we were going to Relate and. .. uh. .. there tends to be a, "oh," and that's it really. You don't have much of a heart to heart with blokes. Um. .. but it's been nice in a way just to say something."[50(p.158)]. Finding 54: Social support [U] "No, I'm not a person for sharing my problems with other people"[54(p.1026)] "They just take the micky really ... keep telling me my life as I know it is over [laughs]"[54(p.1026)] "I tend to find that women stick together and they talk about girlie things and babies and stuff. And they tend to keep it to themselves"[54(p.1026)] Finding 62: Feeling of social changes [U] "I have noticed that my friends and I have drifted so incredibly far apart from one another during these nine or eight months, yes it actually happens..... it's tedious,..but they will come back when they are in the same situation. . .hopefully". [55(p.101)] Finding 84: Struggling for recognition as a parent from mate, co-workers, friends, family, baby, and society [U] "It's always in reference to how [my wife] is doing, and I feel like I have resigned myself more to just responding to what they are asking and that is to say how [she] is doing as opposed to me and how I am doing. . .I really tried to initially go out. . .and open myself up and really share. . .but, so much of the response is, 'You've just got to stick it out. This is her time.' There is no validation of the feelings. There is no recognition. I don't feel like I should deny my feelings and deny what's going on for me. The message is clear. . .'You need to focus on her.' I just haven't found anybody that is real understanding, like 'What is the experience like for you?' (37 weeks gestation) [60(p.14)]	Societal expectations and lack of social/peer support

(*Continued*)

Findings	Categories
Finding 108: Government and society [U] "I think the government or society thinks that the father is not always needed at home, that is why a system is created with only 14 days leave. We could have done with more … it appears like the father has to be moved out of the house as soon as possible."[+63(p.52)]	
Finding 6: Lack of guidance and obstacles for achieving new fatherhood [U] "I felt shit scared. Having a new baby is a worrying time and I feel I lack a bit of confidence. .. fathers are invisible to some of these facilities– facilities don't take fathers into account."[+49(p.73)] Finding 35: Diversity of men's support networks: Lack of information resources tailored to men [C] "I wouldn't know if there is anything, the equivalent for dads, I've not really set out to look that specifically, I've just come at it more as being a parent … I absolutely would [feel comfortable using netmums] more than happy to look for help, advice, and other people's experience anywhere really".[51(p.10)] Finding 36: Information [C] The Haynes Baby Manual (Banks 2003) was the only publication mentioned that was aimed at men: "Oh, I've got my Haynes manual. .It's the Haynes manual for babies, a guy at work whose wife had a baby recommended it to us".[52(p.629)] "Apart from this, frustration was expressed at the lack of information intended specifically for new fathers".[52(p.629)] Finding 38: Support [U] I would have, yeah, really struggled to have anyone to go to yeah, because. .the care is, it is very much geared towards the women.[52(p.629)] Finding 51: Lack of knowledge about childbirth [U] "It could be a bit more directed towards fathers. As regards information … There could be a bit more for fathers. There could be a little booklet telling you all the information you need"[+54(p.1024-25)] "I suppose a bit nervous and frightened. Because I don't know what to expect. Well I do and I don't. But it's the first time so I don't know really what to expect until it actually happens".[54(p.1025)] Finding 106: Experience of the NHS and father's well being [U] "I think the thing that struck me was you are either treated as a couple having a child or as a mother. There is nothing focused on or no support groups for fathers. There is nothing to help you prepare for your role…"[+63(p.46)]	Lack of tailored support or information resources for fathers
Finding 7: Determination and sustained effort required to challenge the constructions of fatherhood [U] "I had to take the initiative with early childhood services, I had to push to get involved–men have to take more initiative in services, but if they push they get what they want."[+49(p.76)] Finding 28: Legitimacy of paternal stress and entitlement to health professionals' support: Entitlement to health professionals' support [U] "I think at the birth I felt a bit more like a spare part, ut then again I mean they were really good with [partner], I just felt in the way sort of thing".[51(p.8)] "[The midwife]'s interested in [partner] and knowing that I was supporting her, but not so much as me, which, they can't involve everyone, or take a responsibility for everyone … I very much felt like it's certainly not about me, this. But at the same time, I do very much appreciate the limited resources. They can't be responsible for everyone. The pregnant woman is the priority, isn't she"…. [51(p.6)] Finding 37: Involvement in healthcare provision [C] "The classes are a great help, but if you're not involved in it, you're sort of put to the back of the class, so to speak. [52(p.629)] Finding 47: Self and other interacting with nurses: exchanging information with nurses [U] "It was important to me that all the involvement I had had during pregnancy, childbirth and now, after, be recognized by someone else than my spouse. I wanted others to be able to recognize my involvement, by simply talking to me, by including me in conversations. I wasn't excluded by nurses, they didn't ask me to leave the room, but it was a nonverbal exclusion, by the way their body was. .. they never asked me how I felt as a dad"[+53(p.334)]. Finding 55: "Being there": men's experiences of the labour and birth–presence during labour [C] "I'm not the greatest person with needles and blood. .. But I was fine. I was more focused on [partner] and how she was feeling than thinking about what I was feeling"[+54(p.1028)] "They were coming and checking her every couple of hours and every time they asked me to leave. .They'd say 'Do you mind going out I'm going to check her'. .At the time you don't think. You do what you're told".[54(p.1029)]	Lack of acknowledgment and involvement by health professionals

(*Continued*)

Findings	Categories
Finding 57: "Being there": men's experiences of the labour and birth–Healthcare professional [C] "When you go in [the labour room] there is a bed and a chair…Your expectation is that's your chair and you don't move. It's all lined up like that…There is a chair next to every bed at the head…so like you know your place when you go in…But that wasn't the case …Every time they got me involved…when they took me through it…that was an extra for me…[Later in the interview] I didn't think they would get me involved as they did… [But] I don't think I would have walked away thinking, 'Oh I wasn't involved'. Because the emotion of seeing your daughter born…being there to see it would cancel that out…I am grateful that they did get me involved, but I don't think it would have made the day any worse if they didn't"[54(p.1028)] Finding 60: Feeling of exclusion [U] "…she said hallo to my wife and turned her back on me so I had to push myself forward, in front of her, so that I could shake hands with her as well. For the first five minutes she only looked at my wife and spoke to her alone 'What do you think?' (Edward) (Translators note-the singular form of 'you' was used in the Swedish)[55(p.300)] Finding 75: Present, but not participating [U] "[W]e're expected to do a lot more these days, we're expected to be a lot more involved … but when we are involved we're still a bit on the outskirts from what I've seen … I don't know if it's because a lot of women don't take their partners with them, I'm not sure how other people work. It's sort of maybe they're not always used to having a man there as well, but it would've been nice to be acknowledged a little bit more, just so you feel a bit more part of it more than anything. Because you feel a bit awkward sometimes just stood there like 'Should I wait outside?'"[58 (p -1009)] "I felt as if I shouldn't be looking kinda thing, you know, 'coz when you grow up and people pull the curtain across, it means you shouldn't be looking in there doesn't it or it's like a private area. Even though it's my wife, I'm kinda thinking, I think I might have even backed into the err, behind the curtain when I went to record off the–off the machine on the wall. But it made me feel quite uneasy to be honest".[58(p-1009)] Finding 135: Imagining life and needs with a baby: Gendered roles [C] "I mean they [the birth classes] make the father out to be a complete idiot; you are always referred to as the bloke at the end of the bed who got you into the mess in the first place–you know what I mean? Referred to as the guilty party, but you know we're getting off lightly. We get this little present at the end and we have to do nothing for it, you know"[67(p.49)]	
Finding 34: Diversity of men's support networks: "Formal" peer support and opportunities to meet other fathers [C] "I think in some ways it would be helpful before and after to make sure that dads are prepared and that they're coping and maybe even if it was just away from the mums for some people maybe, because I think some dads might find it a bit embarrassing to sort of say I don't know what I'm doing."[51(p.30)] Finding 39: Preparation for fatherhood [C] "I would look now to wanting more information about what to do when I've actually got it…even little things like what clothing, when you put it to bed, getting into a routine, even the basics, really".[52(p.630)] Finding 41: Parents' relationships [C] "You are both tired, niggling at each other, and it was probably slightly worse from what we thought. I mean, if the awareness could have been made a lot more, because no one ever really spoke to us about that other side…the relationship with us and the baby. We sort of sat down and we tried about two or three different ways and thought about this"[52(p.631)] Finding 122: Acknowledging ones' limitations [C] "You can't prepare yourself for everything but if this thing happens you have information and the necessary prerequisites to deal with the situation".[63(p.90)] Finding 128: The need for guidance [C] "The midwife was very nice… and she asked: do you have any questions? But you don't have any questions if you don't know what is coming. I would know now (after birth) what to ask"[94(p.90)]	Need for guidance around preparing for fatherhood and relationship changes

(*Continued*)

Findings	Categories
Finding 33: Diversity of men's support networks: Pre-existing networks–friends, family and the wider community [C] "[At work] I can cover an awful lot of different things with them… And in a lot of cases, it is bloke banter. You wouldn't think that it [but] you're in the middle of an engineering workshop surrounded by blokes, and we probably spend half the day talking about babies and kids and that sort of thing. But I feel more comfortable with it, because I know that there's guys there that have had similar experiences or they know what it's like. They know how I'm feeling if I say, oh, we've had a rough night … Some people have had worse experiences, so you think, what we're going through is normal."[53(p.10)] Finding 126: Parental groups: the good and the bad [C] "Parents…get them to ask people who have three kids to join in a discussion… because they've already got the gen".[65(p.90)] "Parental groups are an excellent way to prepare but they were too short… we hardly spoke of the time after birth".[65(p.90)] Finding 127: Internet as an asset or a worrier [C] "Most of the time on the internet, because … I'm not a patient person. I want to have everything like that (clicks fingers)". "I looked at YouTube, but you don't know to a hundred per cent which… what experience those showing the film have…Yes, if you think a bit…is it something good or can it be harmful…. "[65(p.90)] Finding 129: Information: the when and how [C] "I learn most when someone tells me things…absolutely. So, I prefer that. But it's probably that you need to have a mixture of things….because some learn by reading and seeing."[65(p.90)] "Information needs to be well choreographed, it needs to capture our interest, it needs to be given in a fun way. Use humor: situations can afterwards be looked at as funny or comic but when you are in it, it's like a matter of life or death".[65(p.90)] Finding 132: Social support received [C] "Generally, it's very useful and supportive if your parents or parents-in-law uuhh… are able to contribute as in, provide advice, share their previous experience and help you to prepare along the way. It's a big encouragement and emotional support ah, from the family".[66(p.784)] Finding 133: Suggestions for improvement to the current maternity care [C] Provide more information "But I think… it's much more can do la. Like encourage my wife to do the pregnant lady exercise all these things. Uuhh… for instance, he didn't really tell me where la".[66(p.785)] "Another thing is… some of the staff were not that happy to do something, maybe. They just er… do that not very carefully. May be if you ask she… need to do something, she will just do that, just finish, not very carefully to finish".[66(p.785)] Finding 137: Preferred sources of information and support [C] "Seeing [on the DVD] not the specialists, not the experts but the guys who were actually going through that situation without knowing much, the way we do. I could identify with those"[67(p.50)] Finding 138: The role of primary care in mental health care for new parents: Routine enquiry [C] Authors interpretation: health professionals' role should be limited to giving information: "they've got an obligation to let you know information" and suspicion that these health professionals are "not qualified to emotionally help you" (M1), because their training prepares them to treat physical not mental illnesses: "I don't know how much of their training would be on the emotional side of things" (M2) [67(p.50-51)] Finding 139: The role of primary care in mental health care for new parents: Screening questionnaires [C] Men's willingness would depend on how long the form was: "where there aren't too many boxes to tick, three or four. .. ten's a struggle" (M4); how they were feeling at the time; "the value you think you are going to get from it at the time" (M4); and whether there were competing priorities. [67(p.51)]	Preferred sources of Information and support
Finding 32: Navigating fatherhood: Strength through fatherhood as rewarding [U] "The sleepless nights do take their toll on you, but I don't know if it's just the way that I think … but I tend to look at the bigger picture. I just think I'm happy because she's healthy, she's smiling… So I think, well, I must be doing something half right for her to be trotting around as she does, and she's happy with me".[52(p.9)] Finding 61: Feeling of reality [C] "I think it was enormously moving, I started to cry,… so it was so, soy, a human being is living here inside? It was, still only such a little thing.…It was the first ultrasound, I felt enormously taken….Then it was in the sixth, seventh, eight month, then everything was wonderful. It's obvious to me that she is growing every day. Everything works when we go to listen to the heartbeats, to ultrasound and so on. It's like I am able to share something which is real".[55(p.106)]	The rewards of bonding with their child

(*Continued*)

Findings	Categories
Finding 67: Transition to mastery [C] "I noticed for the first 2 weeks he was home I was still living my same lifestyle. I go out once in a while and I'd just leave them home, and I think right then is when don't to myself, I don't feel any part of this, and the important thing I think for a father to do is to get involved. The more you get involved the more rewarding it becomes like when you get his first smile or his first laugh."[56(p.296)] Finding 70: The pleasures, benefits and rewards of bonding with their child [U] "I think the nicest bit is just spending time sitting around on the bed and just playing with him, and just talking to him and being talked back at, and changing his nappy when that happens as well and, you know, time looking at him and him looking at me really is the bit that I'm really enjoying"[57(p.344)] "I do like feeding him and I do enjoy that. And after the feed he just snuggles up to you and he gets his head right into your neck, and that is lovely. And I do and if I fall asleep with him it is fantastic lying on your chest, and I do enjoy that"[57(p.344-345)] Finding 80: Sharing time and space with one's child [C] "Nine months ago, it was like she suddenly started to cry. It was like an alien, or maybe a strange creature. But she started to show some gestures, or smiling, or show various expressions. I thought it was a change".[59(p.163)] Finding 95: Engagement [U] "My heart feels warm when I talk to him…. I feel like it's listening to me seriously and then he looks at me with a pair of curious eyes".[61(p.66)] Finding 103: Fatherhood–the early days: Gaining confidence and regaining control [C] "It was purely about experience and from that comes confidence … the more you do the more you learn and as time goes on you remember how you've dealt with things in the past … I wanted to make sure that I got stuck in … being off work for a month gave me the opportunity to get involved"[62(p.7)] Finding 105: Bonding and co-parenting [U] "I feel like our bond has grown. I think when it started off she was such a responsibility, she was such a … burden is not the word … she was such hard work that I think it is difficult to build a bond straight away…. I think your resentment of "you are making me get up at this time, making me do this again" is quite overpowering but as they get older you play with them more, see their personality … your bond grows."[63(p.43)]	
Finding 66: Reality [C] "But now J [wife] will take the opportunity to take a bath that she doesn't get to do during the day. Everything has to be done in shifts now. Before we could sit down and be together. You spend so much time focusing on the baby you forget about each other".[56(p.296)] Finding 81: Being aware of a change and trying to adjust to a new life [U] "Talking about meals, if at restaurants, I'm afraid that my daughter will cry to bother people, so I come to think of eating at home. I think our eating style has changed. But for me, it's not something inconvenient, unpleasant, nor restricted. Rather, I am enjoying the time".[59(p.163)] Finding 100: Fatherhood–the early days: Trial and error parenting [U] "Initially it is all about trial and error, at least that's how it was for us, purely trial and error … in the early days we were both sort of saying, what's wrong with him? Is it his nappy? Is it food? Is it sleep? And you go through that sort of list until you find something that makes him quiet and you go, well it was that then, and so you start to notice those signs a little more each time".[62(p.6)] Finding 116: Caring for the baby in both health and illness [C] "Every baby is different. You have to expect the unexpected and not have too many preconceptions about how the baby should behave".[65(p.88)] Finding 118: Still being a couple but not as before [C] "That there's a lot of focus on the child… and the partner in the relationship gets forgotten. And then sexual life…you need to be aware of…you want to know what's normal? It's important that it's still a relationship, but you can adjust the relationship a bit".[65 p.88)] Finding 136: Imagining life and needs with a baby: Relationships [C] "… now and again you're probably going to come home and walk in and it's not going to be all champagne and chocolates. You're going to have bad days and be upset or angry or something and trying to determine and learn the difference between they are not actually angry with you so don't snap back".[67(p.49-50)]	Recognizing and adjusting to changes of parenthood

(*Continued*)

Findings	Categories
Finding 30: Navigating fatherhood: Feeling prepared and (changing) expectations [C] Some men reflected on the importance of changing their expectations, acknowledging that some of their stress reflected an unrealistic standard that they and their partners had set for themselves: "Even though it wasn't by the book, but it made our lives a lot easier and that I think helped as well, not listening to what everyone told us".[51(p.8)] Finding 101: Fatherhood–the early days: She leads, I follow [C] "I learned a lot from watching Jane [wife] with him, you know how to hold him, change a nappy, bathe him".[62(p.6)] Finding 102: Fatherhood–the early days: Working together [C] "Another thing we did was the both of us were getting up in the night to deal with her [daughter] and we soon realised that maybe I needed some more sleep so Anna [wife] would get up and do all the night feeds one night and I would do all the night feeds the next night …we soon got her onto the bottle so I could help out with the dream feeds while Anna slept and when she got up to do the next feed I would be able to go to sleep … working in partnership is key".[62(p.6)] Finding 124: Communicating with ones' partner [C] "We've talked… through the whole pregnancy because things can change–what you think and believe. That way you avoid irritation and rows".[63(p.89)] Finding 125: Forming a fatherhood identity [C] "It's important to be prepared for the fact that there will be a lot of mother and baby time. I have to see that they are as comfortable as possible. She's got a full-time job with her (the baby), with breastfeeding, like".[63(p.89)] Finding 131: Adaptive and supportive behaviors adopted [C] "We used to meet on and off during the weekends. So I stopped going there and then even for parties, I used to attend a lot. She can't stay there for long time. She'll get pain… So, even if we're going, we just go and then say hi and spend there 10 min and come back because she can't stay for more time. Or, if possible, I used to avoid also".[64(p.784)]	Working in partnership

U, unequivocal; C, credible; NHS, National Health Service

Appendix VI: JBI Levels of Evidence[103]

Levels of evidence: meaningfulness	
Level 1	Qualitative or mixed-methods systematic review
Level 2	Qualitative or mixed-methods synthesis
Level 3	Single qualitative study
Level 4	Systematic review of expert opinion
Level 5	Expert opinion

Appendix VII: JBI Grades of Recommendation[103]

JBI Grades of Recommendation	
Grade A	A "strong" recommendation for a certain health management strategy where i) it is clear that desirable effects outweigh undesirable effects of the strategy; ii) where there is evidence of adequate quality supporting its use; iii) there is a benefit or no impact on resource use, and iv) values, preferences and the patient experience have been taken into account.
Grade B	A "weak" recommendation for a certain health management strategy where i) desirable effects appear to outweigh undesirable effects of the strategy, although this is not as clear; ii) where there is evidence supporting its use, although this may not be of high quality; iii) there is a benefit, no impact or minimal impact on resource use; and iv) values, preferences and the patient experience may or may not have been taken into account.

4.6 Statement of the Contribution of the PhD Student to this Paper

The systematic review protocol was developed by the researcher (SB) with support from her supervisors (DB, JS, MM). The initial database searches for the review and citation tracking was performed by SB. Following this the titles and abstracts were screened independently by SB and DB. Selected papers were then assessed for methodological validity independently by SB and DB. SB extracted the data from each of the selected papers and assigned a level of credibility as per the JBI guidelines. These were then discussed amongst SB, DB, and MM resulting in general consensus with allocation of these levels. SB analysed the data, which was discussed with her supervisors (DB, JS, MM) at each stage and agreed. SB drafted the first version of this paper and made all necessary preparations and amendments for publication, with support from her supervisory team.

4.7 Chapter Summary

This chapter presented a published systematic review, undertaken in study *phase I* to answer the first research question: *What is already known about men's mental health and wellbeing during their transition to fatherhood?* Gaps identified in this review with respect to the type of support that fathers may want, how it is provided, by whom, and the optimal time for providing this; and whether new fathers would welcome routine mental health enquiry or screening by health professionals, informed the focus of the qualitative study in *phase II.* This review has highlighted the importance of exploring the experiences of non-resident first-time fathers (those not residing with the partner and child) and first-time fathers from different ethnic and cultural backgrounds, to gain a broader understanding of fathers' mental health and wellbeing needs during their transition to fatherhood.

CHAPTER 5: PHASE 2 - QUALITATIVE EXPLORATORY STUDY OF FIRST-TIME FATHER'S EXPERIENCES, MENTAL HEALTH AND WELLBEING NEEDS DURING THEIR TRANSITION TO FATHERHOOD

5.1 Introduction

This chapter incorporates a published qualitative paper (Baldwin et al., 2019), which forms Paper 2 of this PhD thesis. In this chapter additional description of the aims and objectives, and justification for the research methods used are provided. It also describes the data analysis process, which was not included in the published paper due to journal word restrictions. The supplementary information provided in this chapter complements the published paper and provides a detailed overview of this study phase.

5.2 Study Aims and Objectives

The aim of the exploratory qualitative study was to consider how men experienced first-time fatherhood, what their perceived mental health and wellbeing needs were during this period, and explore gaps in evidence identified in the systematic review in Chapter 4 (Paper 1), namely type of support new fathers wanted, how this was provided, who provided it, the optimal time for providing it (in the perinatal period), and whether new fathers would welcome routine mental health screening by health professionals.

5.3 Research Questions

The study was undertaken to answer the second research question of this study: *How do first-time fathers perceive their mental health and wellbeing needs during this transition?*

The specific research questions were:

- What are men's experiences of, and feelings related to becoming a father for the first time?
- How do men prepare for becoming a father for the first time?
- How does becoming a father impact on men's emotional wellbeing?
- How do men cope with the changes of becoming a father for the first time?
- How does becoming a father impact on their relationship with their partner?
- What support/ resources do first-time fathers access?
- How do first-time fathers perceive the support they receive from health professionals (MW, HV, GP) both antenatally and postnatally?
- What information, resources or advice do first-time fathers perceive as being helpful?
- What additional information, resources or support would first-time fathers find useful?
- What are the barriers to first-time fathers accessing help/ support?
- What would enable first-time fathers to better access help or support?
- When would be the best time for men to receive support or information about emotional wellbeing relating to becoming a father?
- Would first-time fathers welcome routine mental health enquiries from health professionals?

5.4 Published Paper 2: A qualitative exploratory study of UK first-time fathers' experiences, mental health and wellbeing needs during their transition to fatherhood

The full paper can also be accessed here:
https://bmjopen.bmj.com/content/9/9/e030792.info

Baldwin S., Malone, ME., Sandall, J. Bick, D. (2019) A qualitative exploratory study of UK first-time fathers' experiences, mental health and wellbeing needs during their transition to fatherhood. BMJ Open;9:e030792.

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A qualitative exploratory study of UK first-time fathers' experiences, mental health and wellbeing needs during their transition to fatherhood

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ABSTRACT

Objectives To develop an understanding of men's experiences of first-time fatherhood, their mental health and wellbeing needs.

Design A qualitative study using semi-structured interviews. Data were analysed using framework analysis.

Setting Two large National Health Service integrated care trusts covering four London (UK) local authority boroughs.

Participants First-time fathers with children under 12 months of age were included. Maximum variation sampling was used, with 21 fathers recruited. Ten of these men described their ethnic background as Indian, seven as White British, one as Spanish, one as Black African, one as Black Caribbean and one as Pakistani. Participants' ages ranged from 20 to over 60 years; completion of full-time education ranged from high school certificate to doctorate level; and annual income ranged from £15 000 to over £61 000. Non-English speaking fathers, those experiencing bereavement following neonatal death, stillbirth, pregnancy loss, sudden infant death, and fathers with existing severe mental illnesses were excluded.

Results Nine major categories were identified: 'preparation for fatherhood', 'rollercoaster of feelings', 'new identity', 'challenges and impact', 'changed relationship: we're in a different place', 'coping and support', 'health professionals and services: experience, provision and support', 'barriers to accessing support', and 'men's perceived needs: what fathers want'. Resident (residing with their partner and baby) and non-resident fathers in this study highlighted broadly similar needs, as did fathers for whom English was their first language and those for whom it was not. A key finding of this study relates to men's own perceived needs and how they would like to be supported during the perinatal period, contributing to the current evidence.

Conclusions This study provides insight into first-time fathers' experiences during their transition to fatherhood, with important implications for healthcare policy makers, service providers and professionals for how perinatal and early years services are planned and provided for both new parents.

Strengths and limitations of this study

- Little is known about the mental health and wellbeing needs of first-time fathers. Using a qualitative methodology enabled the collection and analysis of in-depth data about the needs and experiences of first-time fathers during their transition to fatherhood.
- Use of framework analysis enabled data exploration while simultaneously maintaining an effective and transparent audit trail, enhancing the rigour of the analytical processes and credibility of the findings.
- The needs of first-time fathers reflected a range of ages, ethnic groups, education levels and income. While this provided a much broader understanding of fathers' mental health and wellbeing needs across different groups of men, it is acknowledged that this study was not representative and demographic differences in the small sample were not associated qualitatively with any specific views or experiences.
- Young fathers (under 20 years), unemployed fathers and those from lower socioeconomic groups were under-represented in the study sample.
- As this study was planned to be exploratory in nature, findings cannot be generalised to the wider population. However, findings have highlighted issues that may be of relevance for first-time fathers in other settings.

INTRODUCTION

The transition to parenthood can be a stressful time, with changes to lifestyles which can significantly impact on the mental health and wellbeing of both parents.[1–3] Positive mental health is defined as 'a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community' (WHO, pXIX).[4]. Rather than just focusing on prevention and treatment mental illness, the importance of promoting positive mental wellbeing has been highlighted by the Royal Society for Public Health in the UK.[5] Men's mental health and wellbeing during this period continues to be under-researched, with new fathers' health needs frequently unmet.[6] A systematic review

reported a prevalence rate for anxiety in men to range between 4.1% and 16.0% during their partner's pregnancy and between 2.4% and 18.0% during the 6/8-week postnatal period.[7] Reviews have found that depression affects 8%–10.4% of fathers between the first trimester of their partner's pregnancy and 1-year postpartum.[6 8] Research from Denmark[9] and the USA[10] showed that new fathers' depression rates were double the national average for men in the same age group who were not fathers. It has also been suggested that the incidence and prevalence of paternal mental health problems may be much higher than currently reported, as screening tools used to identify maternal mental health problems may not be as reliable when applied to men.[11]

Depression and anxiety in fathers during the perinatal period can affect their working and short-term memory loss,[12] and negatively impact on their ability to undertake aspects of their paid employment.[13] It can also have a profound impact on relationships with their partner and child.[14 15] Mental health problems in fathers are not only confined to the man, but are associated with cognitive, emotional, social and behavioural problems in their children.[16–19] A recent study of over 3000 families in the UK identified a link between postnatal depression in fathers and an increased risk of depression in their daughters at age 18.[20] While the available evidence suggests that the rates of mental health problems in new fathers and impacts on their families are widespread and persistent, UK policies for maternal and child health services do not currently address this.[21] To support men's mental health and wellbeing during their transition to fatherhood it is essential to better understand their experiences and the specific needs they may have during this period.

A recent qualitative systematic review undertaken by the authors identified three main factors that affected first-time fathers' mental health and wellbeing during their transition to fatherhood: the formation of the fatherhood identity, competing challenges of the new fatherhood role and negative feelings and fears relating to it.[22] In addition to these findings, the review highlighted a number of barriers and facilitators to fathers accessing timely and appropriate support, with several areas highlighted for further research. The fathers in the primary studies included in the review lacked ethnic diversity, and only included first-time resident fathers (those residing with their expectant partner, or their partner and child), with the mental health and wellbeing needs and experiences of first-time fathers from different ethnic and cultural backgrounds, and non-resident fathers, unknown. In the review the credibility of the finding relating to 'what fathers want' was rated as 'low' by the reviewers, based on the ConQual criteria,[23] suggesting caution should be applied to implementing findings into practice. The review findings suggested that *to better support first-time fathers' mental health and wellbeing during their transition to fatherhood it was important to establish what support new fathers want, and what interventions would be acceptable to them* (Baldwin *et al*, p2144)[22].

The need to investigate expectant and new fathers' information needs during the perinatal period has been identified by others in the field.[24] There is a clear need for research into the type of support new fathers want, how this is provided, who provides it and when would be the optimal time in the perinatal period to offer support. Another aspect that remained unclear in our systematic review was with regard to routine mental health screening for new fathers,[22] suggesting further qualitative research in this area to ascertain men's perceptions and receptiveness to mental health screening.

This qualitative exploratory study was designed to develop an insight into first-time fathers' mental health and wellbeing needs, focusing specifically on the gaps identified in the systematic review.[22] Non-resident first-time fathers (those not residing with the partner and child) and first-time fathers from different ethnic and cultural backgrounds were included to provide a broader understanding of fathers' mental health and wellbeing needs during their transition to fatherhood.

The Consolidated criteria for reporting qualitative research (COREQ) guidelines[25] informed the reporting of the study.

The main aim of the study was to consider how men experienced first-time fatherhood and what their perceived mental health and wellbeing needs were during this period. This included how men prepared for becoming a father; how it impacted on their emotional wellbeing; how they coped with the changes; what support/resources they accessed; how they perceived the support from health professionals; what were the barriers and enablers to accessing support; and when would be the best time to receive support or information about emotional wellbeing relating to becoming a father.

METHODS

A qualitative approach was used to address the study aims and objectives. Choosing the right qualitative approach was important. A pragmatic approach was necessary, based on the research questions of interest rather than alignment with a specific epistemological stance.[26] After careful consideration, a decision was made to use qualitative approach informed by framework analysis.[26]

Study setting

Four London administrative districts (known as boroughs in the UK) (two inner and two outer cities) whose population healthcare needs are served by two National Health Service (NHS) organisations were selected as study sites, to support the recruitment of a diverse group of fathers. Each site serves diverse socio-economic and cultural populations, with minority ethnic groups representing 44%–69% of the overall total population of the borough selected.[27]

Table 1 Study inclusion/exclusion criteria

Inclusion criteria	Exclusion criteria
► First-time fathers with children under 12 months ► Resident fathers (biological or non-biological) ► Those living within the health catchment area of the two NHS sites	► Non-English speaking fathers ► Fathers experiencing bereavement following neonatal death, stillbirth, pregnancy loss, sudden infant death ► Fathers with existing severe mental illnesses such as schizophrenia, schizoaffective disorder, personality disorders, major depression and bipolar disorder

NHS, National Health Service.

Participants

Twenty-one first-time fathers were recruited between September 2017 and February 2018. In the UK, health visitors, who are specialist community public health nurses, provide a routine contact to new families referred to as the 'new birth visit' around 10–14 days after birth. During these contacts, health visitors offered invitation letters and study leaflets to all first-time fathers who met study inclusion criteria (Table 1). In cases where the father was not present during the contact, these were offered to their partners. Local father's groups, GP (family doctor) practices, health centres, children's centres, nurseries and child health clinics were asked to display study posters and disseminate leaflets.

Only first-time fathers with children under 12 months of age were included. Maximum variation sampling was used, a method that explores important shared patterns across cases that emerge out of diverse variations and heterogeneity.[28] This sampling method ensured diversity in location, ethnicity, age, religion, education levels and social class, where possible.

Initially 25 men interested in participating in the study contacted the first author, of whom they had no prior knowledge. After discussing the inclusion/exclusion criteria, 21 fathers who all met the criteria were included. None meeting the inclusion criteria refused to take part. Participation was voluntary and written informed consent was obtained from each participant (see online supplementary appendix A). Table 1 outlines the study inclusion and exclusion criteria.

Data collection

Face-to-face in-depth interviews were carried out by the first author until no new information was forthcoming and data saturation reached.[29] A topic guide (see online supplementary appendix B) was developed to provide structure and focus to the interviews, which were audio-recorded and transcribed using an approved transcription service. Participants were offered an opportunity to check their interview transcript for accuracy and provide feedback prior to analysis. Most interviews were carried out in the participant's home setting, one was undertaken in a health centre, one in a hotel lounge and one in a university setting. In two cases, the participant's partner was present during the interview. The duration of the interviews varied between 12 and 52 min, with the average being 28 min.

Field notes were written after each interview to record aspects of the interview that may not be captured on the recording such as environment, context, general observations and thoughts.

Data analysis

Data were analysed by the first author (SB) using framework analysis and the five steps of data management for thematic analysis as described by Ritchie *et al*,[26] namely: familiarisation; constructing an initial thematic framework; indexing and sorting; reviewing data extracts; and data summary and display. The findings were discussed among the research team (all four authors) at each stage and there were several iterations of this process, before the final nine categories were developed and agreed by all authors. NVivo (V.11) was used to facilitate this process.

Research team and reflexivity

The research team consisted of the first author (SB), who undertook all aspects of this study, with support from three members of her supervisory team (DB, JS, MMM). The risk of personal bias was acknowledged, especially being a female researcher exploring men's experiences. For this reason, it was important to have active involvement of a patient and public involvement (PPI) group in all aspects of this study.

Patient and public involvement

A group of fathers influenced the focus of the study and research design. Contact with these fathers was made through a local fathers' group in a children's centre, which included fathers of varying ages from diverse cultural and ethnic backgrounds. Feedback from these fathers during the development of the study helped influence the research question, study design and data collection method. Following this, a PPI group of four first-time fathers was established to provide expert PPI to all aspect of this project. They were involved in the development of all research documents, the recruitment strategy, and consulted about the data analysis process, implications of study findings and dissemination approaches. The Fatherhood Institute, a leading non-profit organisation for fathers and fatherhood in the UK, acted as specialist

Table 2 Participant characteristics

Participants' pseudonyms	Age	Ethnicity	Religion	First language	Employment	Income	Education	Living with mother	Baby's age
Neil	30–34	Indian	Hindu	English	F/T	61K+	MSc or PhD	Y	7 months
Dev	30–34	Indian	Hindu	English	F/T	15–30K	Degree	Y	8 weeks
Arjun	30–34	Indian	Hindu	English	F/T	46–60K	Degree	Y	6 weeks
Raj	35–39	Indian	Hindu	Gujarati	F/T	15–30K	Degree	Y	12 weeks
Jay	35–39	Indian	Hindu	Hindi	F/T	46–60K	MSc or PhD	Y	7 weeks
Miguel	40–44	Spanish	Christian	Spanish	F/T	15–30K	Degree	Y	4 weeks
Ravi	35–39	Indian	Hindu	English	F/T	46–60K	Degree	Y	8 weeks
Krish	40–44	Indian	Hindu	English	F/T	46–60K	Degree	Y	3 weeks
Tom	35–39	White British	Christian	English	F/T	31–45K	Degree	Y	8 weeks
Ahmed	35–39	Pakistani	Muslim	English	F/T	46–60K	MSc or PhD	Y	3 weeks
Lee	35–39	White British	No religion	English	F/T	31–45K	Degree	Y	9 months
Lloyd	20–24	Black Caribbean	Christian	English	F/T	15–20K	GCSE	N	6 months
Simon	30–34	White British	Christian	English	P/T	15–30K	Degree	Y	4 weeks
Charlie	30–34	White British	No religion	English	F/T	31–45K	MSc or PhD	Y	4 months
Sanjay	35–39	Indian	Hindu	English	F/T	Not revealed	Degree	Y	10 weeks
Adrian	30–34	Black African	No religion	English	P/T	15–30K	MSc or PhD	Y	7 weeks
Sam	30–34	White British	No religion	English	F/T	61K+	Degree	Y	9 weeks
Akash	30–34	Indian	Sikh	English	F/T	Not revealed	MSc or PhD	Y	6 weeks
Richard	Over 60	White British	No religion	English	F/T	15–30K	A levels	N	8 weeks
David	35–39	White British	No religion	English	F/T	61K+	MSc or PhD	Y	6 weeks
Ali	30–34	Indian	Muslim	Tamil	F/T	61K+	MSc or PhD	Y	8 weeks

advisors to the project and will be involved in the dissemination process.

Ethical considerations

The study was conducted in compliance with the Research Governance Framework for Health and Social Care and Good Clinical Practice. All interviews were carried out on a voluntary basis and participants could withdraw from the study at any stage, although none chose to do so. The interviews were transcribed with the principle of anonymity in mind and a confidentiality agreement was in place for the approved transcribing service used. Pseudonyms have been given to all participants in the illustrations used, to protect their identity (see table 2).

RESULTS

Sample characteristics

Participants' ages ranged from 20 to over 60 years; completion of full-time education ranged from high school certificate to doctorate level; and annual income ranged from £15 000 to over £61 000. Two men did not reveal their annual income, and two worked part-time while the rest were in full-time paid employment. Ten men described their ethnic background as Indian, seven as White British, one as Spanish, one as Black African, one as Black Caribbean and one as Pakistani. For four men, English was not their first language (but translators were not required). The interviews were carried out at various points during the first year after their child's birth, ranging from 3 weeks to 9 months. Two fathers were not residing with their partner and baby at the time of the interviews. See table 2 for full participant characteristics.

Nine major categories pertaining to fathers' experiences and perceived mental health and wellbeing needs were identified from the data:

1. Preparation for fatherhood.
2. Rollercoaster of feelings.
3. New identity.
4. Challenges and impact.
5. Changed relationship: 'We're in a different place'.
6. Coping and support.
7. Health professionals and services: experience, provision and support.
8. Barriers to accessing support.
9. Men's perceived needs: what fathers want.

Preparation for fatherhood

When it came to antenatal preparation for the birth, some men described that they had not prepared at all, while others had used various approaches. One father talked about focusing on the 'practical' aspects of infant care:

I made sure I had clothes, Moses basket, things like that, all in place so it's not a rush [Lloyd].

While another father reported to be 'over prepared' as he had sought to gather so much information:

We did antenatal classes, we did hypnobirthing classes, we did a lot of reading, we had a good group for our NCT classes, so we used to message each other, and that sort of thing [Akash].

The experiences of fathers who attended antenatal classes varied. Some sessions only focused on 'normal' births, while others the practical aspects of new parenthood and none addressed the 'social, mental aspects of it' [Neil]. Those who felt included by the health professionals found the sessions helpful and prepared them well for what to expect from the birthing process. Prospective fathers also identified the opportunity to meet 'like-minded parents' as a major attribute of antenatal classes [Tom].

Some men however did not have the opportunity to prepare, either lacking time to read information offered to them or being unable to attend antenatal classes as times were inconvenient, or because they were not invited or unaware of when sessions (which may have supported their preparation) were taking place. Lack of flexibility in the workplace was a barrier for some men to attending antenatal appointments or classes.

Rollercoaster of feelings

Men described a range of feelings relating to becoming a first-time father, with emotions ranging from happiness and excitement to apprehension and stress in the antenatal period, with the baby not feeling 'real' during their partner's pregnancy for many.

Mixed feelings

One father described his emotions about fatherhood as:

a rollercoaster ride…we've got a long way to go yet until the baby arrives in this world and having that mixed emotions, really, so there's been stressful times, ……but there's also been times where we've been looking forward to it. [Krish]

Feelings of excitement along with apprehension about being a good father were a common theme:

Excitement was probably the first thing that I felt … it was a little bit of, kind of, apprehension, as in how - what will I need to, kind of, do in terms of being a dad, and will I be able to, kind of, cut the mustard, in terms of being a dad, and that type of thing.[Neil]

Feelings of apprehension and nervousness appeared to be related to the 'unknown' about becoming a father and worries about their partner and baby's health and well-being, which one man described as being 'pretty scary, overwhelming, life-changing' [Lee].

To describe the positive emotions they experienced about impending fatherhood, men used phrases such as 'over the moon' [Krish], 'rewarding' [Sam], 'proud' [Richard], 'happiness coming from inside' [Raj], 'awesome feeling' [Jay], 'feel absolutely complete' [Miguel], 'brimming with love and joy' [Lee].

Not real

For many men their baby did not seem 'real' during their partner's pregnancy as they could not see the baby or physically feel what their partners were feeling. Some men described not feeling like a father until after the birth of their baby:

Even though the baby was there, you can see the bump, you can see, you know, the baby moving around inside, to me, it wasn't there. Yeah, it wasn't real. It's only until she was born… [Dev].

Another father stated that 'it was something that I couldn't quite process until it [the birth] actually happened' [Charlie].

New identity

Sense of accomplishment and personal growth

Men described their experience of becoming a father as a sense of accomplishment and personal growth. Fatherhood was a positive change which made them feel more secure and confident.

I think, for me, at the moment, it has been a very, very positive change…this thing is going to help me to be a better person, a better father and, yeah, it's good for me. I feel more secure. I feel as well as that more confident. I was fine before, you know, but now I feel like - it's I feel complete [Miguel].

Being able to father a child and start a family was also an important aspect of this change:

… it is a good feeling in a way, 'cause I thought I was - I'm not a confirmed bachelor, certainly a confirmed fatherless person, but a person who wouldn't have children [Ricard].

Several participants felt that becoming a father made them 'stronger' and more 'resilient' as they had to learn how to cope with the demands of early fatherhood by themselves.

You really had to just get on with it, and I guess that makes you stronger as a person for yourself [Ravi].

Changed person

The new fatherhood identity meant a changed lifestyle, which came with different responsibilities, changed priorities and an altered mindset for many of the men interviewed. New fathers described that they now prioritised their partner and baby's needs over their own, as one father said:

your own needs really go out of the window [Ravi].

While another said:

I will compromise all the things for my baby and my family, to be honest….I'm not worried about my things. I'm worried about all my baby's and my wife [Raj].

The new fathers wanted to spend more time with their family rather than going out socially, and acknowledged additional responsibilities they had to take on, to look after their partner and new baby:

You'd rather be at home with the baby. Save a bit of money as well for the baby…in terms of your mind set changes a bit, as well…so you start thinking differently. Now you've got boundaries, yeah? You can't cross them boundaries. [Dev]

Challenges and impact

When asked, all fathers described the impact of new fatherhood on their health and wellbeing in terms of positive and negative aspects.

Challenges relating to labour and birth

Some of the men interviewed found the experience of labour and birth quite stressful, mainly due to not knowing what to expect, as Sam explained:

I just had no idea how long labour could be, 'cause R went into labour and had a basically, a three-and-a-half-day labour. You know, in films it's, like, half an hour labour and, you know, I consider myself reasonably well educated and I didn't really know the detail [Sam].

Tiredness, exhaustion and stress in early fatherhood

A lack of sleep, missing meals and having to balance work commitments with family life were commonly reported triggers for tiredness and stress:

It's tough 'cause you've got - you're not sleeping, you're missing meals and like, I think those - that, for me, just missing the sleep and missing the meals, makes me more cranky and you just become a bit more snappier [Arjun].

Many new fathers found it very difficult to balance work and home life. This stress was often exacerbated for those who wanted to remain at home with their new family rather than be at work. Some new fathers described concerns that they were 'missing out' on their infant's early life because of going to work:

I'm just more concerned about just missing out, as well as just being able to be there, close at hand is, sort of, my concern [Adrian].

The repetitiveness of the cycle of caring for their baby and being in paid employment meant that new fathers had little time for themselves, as one father described:

you give her a feed and you put her to bed and then you unwind, if you can or you don't, and then you go to sleep. And then you'll know like at 12 o'clock or 3 o'clock she'll wake up and you'll have to feed her. And that's the really difficult time. … 'cause you're exhausted from work, and then like, during that period you know something's going to happen. So, you have to care for her then and then, you have to wake up again at 6 o'clock to get ready for work again. And then, you're doing your eight or nine hours at work and you come back and it's - you're doing that same cycle. [Arjun]

Increased worries and pressure

Men felt responsible for taking good care of their partner, for example taking over some of the household chores that their partner would normally do. Some men described the impacts of the additional financial strain of having a baby, but wanted to adequately fulfil their role as a provider:

…there's definitely more pressure on the man, because there's - the second income has just disappeared from the household and all the rest of it. And there's more pressure to get things done and make sure that you're providing for them… [Sanjay].

Worries relating to the health and wellbeing of their baby and partner were apparent in many men's accounts. They worried about 'knowing the right thing' and 'getting it right' as a father. Ahmed described how this impacted on him:

Worry all the time, just that the baby's okay, that, you know, is your wife getting everything she needs and then, is the baby therefore getting everything she needs? Is she going to be healthy? [Ahmed]

Emotional impact

The additional stress resulting from the tiredness and pressure to provide for their family impacted negatively on several fathers. One man described how it made him 'more cranky' and 'a bit more snappier' [Arjun], while another talked about how difficult and frustrating it was not having the right information and knowing what to do in the early weeks following birth, which resulted in negative emotional impacts:

…it can bring you down very, very fast. Very difficult situation sometimes and yeah, an element of you can go into some form of a depressive state where, you know, you start to get frustrated at each other, because you're both unaware what to do and your children are crying and it's like, what do we do? [Ravi]

When not able to give their partner a break by comforting their baby, fathers talked about feeling 'useless' [Sam] and how 'demoralising and demotivating' [Neil] the experience was. Some fathers also expected an instant bond with their baby, and when this did not happen they found the experience quite challenging:

…. particularly in the first week when the baby doesn't recognise you, of just not feeling like they - you can make them feel better. I would say that's probably a challenge [Sam].

Sam also described as feeling 'useless' and as 'bit of a spare part' when not able to stop his child from crying.

Other fathers described not knowing how to help or support their partner who was breastfeeding as being challenging, a situation which became worse when the woman experienced breastfeeding difficulties or the breastfeeding 'did not go to plan':

> Well, I think the most difficult thing that we faced was breastfeeding, and there was a lot of information that was given and it was all, kind of, geared towards how breastfeeding is great for your child, and all of those kind of things, but it was none of the, kind of, practical tips of what to do once things start going wrong, in the sense that your child may not know how to latch. So, as a dad, what can you do to, kind of, support that? [Neil]

Rewards of fatherhood

Although men described new fatherhood as challenging, they also described it as being fun, enjoyable and rewarding. They particularly enjoyed being able to interact with their child and watching them grow:

> It's been brilliant. I've never known anything as joyfully rewarding in my whole life, it's brilliant. Having a baby, the giggles when you do something silly and yeah, he's just great, brilliant. [Lee]

Changed relationship: we're in a different place

Other positive aspects to new parenthood included men describing their relationship with their partner as stronger since the birth of their baby:

> it's definitely brought us closer together. Made us, you know, more in love, stronger as a couple…… We're being very supportive of each other and that has helped build a, you know, helped strengthen our relationship [Simon].

Some men talked about other changes they noticed in their relationship with their partner. These included not having time to spend with their partner, arguing more, being less intimate sexually and their partner being more irritable:

> I probably argue a bit more and that's probably just due to my tiredness. [Arjun].
>
> What possibly has suffered is that in some way, sexually, we haven't been as intimate [Richard]

However, most men recognised that these changes were due to tiredness or the demands of new parenthood and that this was just a different phase of their relationship:

> we've just moved on. We're in a different place …… Our relationship is different now, but we still have fun and we get on most of the time. I mean, we argue once or twice a week maybe, but yeah, generally, we're getting on with each other. [Lee]

Coping and support

Men described a variety of internal and external resources which enabled them to cope with the 'challenges and the impact' of new fatherhood discussed earlier. The need to cope alone was a common theme. One father said:

> I tend to keep it in myself so, you know, I battle it myself, in terms of being - so, you know, lack of sleep, you know, that - my first week back at work and I'm there falling asleep on my desk. But yeah, I don't show it, I just, kind of - oh, he's crying - but I just, kind of, battle in continually……I won't share my, kind of, worries and thoughts. I tend to fight it inside me and think, okay, you know, okay, I'm - you know, I've got this, what - you know, whilst, you know, keep it in my head …I won't show it to, you know, my wife …I won't show her that I'm feeling that way. I just, kind of, put a smile face on, but then tackle it behind the scenes. [Krish]

Another father talked about not wanting to burden his partner with his own worries because she was 'going through much more' than him and that she would not be able to relate to his concerns [Adrian]. He also felt it was socially unacceptable for men to talk about their difficulties and therefore he just had to 'get on with it'. For many men it was just a matter of 'getting on with it' and learning through 'trial and error'.

Men sought information about the practical aspects of infant care from several online resources, including NHS websites, Netmums, Mumsnet and Baby Centre. Some were however cautious about trusting online sources unless they were from NHS websites [David] and found it frustrating not knowing which of 'Google's thousand solutions would be relevant to their own situation' [Ravi].

While some men did not share their own difficulties relating to the challenges of new fatherhood with their partners, others felt comfortable to do so, and worked together with their partner as a team to manage the demands of early parenthood. They shared daily tasks and took it in turns to care for the baby.

External family support was evident in a number of fathers' accounts, which included support from their own parents, siblings and members of their extended families. For some however, this additional support was not available due to their family living in another country or that the advice they received was not relevant to their own situation. Some men sought support from friends but described the conversations as casual and light-hearted. As Lee explained: 'we blokes are rubbish at talking'.

Friends who were not parents themselves were even less likely to relate to the new father's situation. Similarly,

connections made with other fathers through parenting support groups, such as the National Childbirth Trust (NCT), were reported to be helpful, but for many the conversations were still 'light-hearted' and 'not necessarily very deep and meaningful' [Charlie].

Health professionals and health services: experience, provision and support

Experience

Men's experiences of contacts with the relevant health professionals and health services varied. Some men described their interaction with midwives and health visitors as 'really good' [Lloyd], 'always been helpful' [Arjun] and felt they 'were in safe hands' [Lee]. Their experiences were mainly positive when health professionals enquired about their own wellbeing and made them feel included, as one father described:

> the midwives, yeah, made me feel really, kind of, you know, quite an important - as a, sort of, birthing partner, quite a, sort of, important piece of the jigsaw, really [Tom].

However not all men had such experiences, as another father explained:

> …everybody I've been in contact with has, … sort of, been in the mindset of treating you like you're a bit of a tool… I was putting the poppers on and obviously [while dressing the baby], there's loads of poppers and because I was a dad putting the poppers on in a room full of mothers, they're [health professional] like ha, ha, you know, look, dad's struggling with - you know, that's - it's general humour that people are quite comfortable with [Adrian].

Despite feelings of exclusion, many fathers simply accepted this as the status quo. They validated this with reasons such as their partner's needs being greater than theirs, and health professionals not having enough time due to their workloads:

> they were concentrating on M and the baby. No, I don't think - did they ever ask me? I don't think so, no. They're busy, aren't they? [Lee].

One father [Tom] felt that the health visitor was mainly there to check up on them from a child protection point of view and was unable to answer the questions they had asked. This made him question the knowledge base of the health professional. Others felt they received conflicting advice from different health professionals [Akash] and some referred to a lack of coordination between members of the perinatal health services [David].

Provision and support

A lack of adequate facilities for fathers in hospital labour wards was raised. There was no provision for fathers to sleep, eat or wash, even when they had to stay with their partner overnight:

> during the hospital stay, you know, there's, sort of, no provision made for partners…I mean, you're allowed to sleep on the floor, which is lovely, and you know, doable, but … there are no facilities where one can take a shower, for example, you just have to go home [Simon].

This was particularly problematic when they had to stay there for long periods, supporting their partner in labour. Men also found it difficult when they were asked to leave overnight following their baby's birth as Ali explained:

> …when the baby is born they don't allow you to stay in the hospital, so maybe there can be some improvements over there [Ali].

When it came to accessing support for their own mental health and wellbeing, most fathers said they would only approach health professionals as their last port of call and the GP (family doctor) would be their professional of choice, as David explained:

> I'd consider seeing a GP for a referral, but I wouldn't approach the Maternity Services for that stuff. I wouldn't ask the Health Visitors or other people we see at the GP.

Barriers to accessing support

The men interviewed described a general lack of appropriate support and information for new fathers. Only being able to obtain information through attending antenatal classes, which were more tailored to women, was insufficient. Some struggled to get appointments with their GP for their own mental health needs in a timely manner. Many did not know if there was any specific mental health support available to fathers. As one interviewee stated:

> You don't really know it's accessible to you [Arjun], while another said: I don't know where you'd actually go for that kind of support, necessarily. [Sanjay]. Furthermore, ambiguity about how to access mental health support in the NHS was described [Sam].

Some fathers questioned the training of GPs in dealing with fathers' mental health issues [David], or that GPs were too 'stretched' to deal with such issues [Sam]. Men feared taking up health professionals' time with their own mental health worries and avoided seeking help: 'I feel like you really are aware - with that in mind, you really are aware that you're taking up somebody else's time if you are to be in that position, and it's like, you know, I don't want to bore you with my troubles' [Adrian].

Most men were not asked about their mental health and wellbeing by health professionals at any contacts in the perinatal period. They viewed the health professionals as being mainly there for their partner and not for them. Fathers' opinions were perceived by those interviewed as not important. Akash described that involving the father would be a 'foreign concept':

> …no one really asks you how the father is doing, it's all about the baby and the mum. So, yeah, it's just a foreign concept, I think. [Akash]

It was apparent that there were several perceived barriers to men accessing support for their own mental health and wellbeing, including a general view expressed by the interviewees that it was difficult for men to talk about mental health problems. As perinatal services were perceived as being mainly for women, men often felt uncomfortable in female dominated groups such as those for breastfeeding support, postnatal support and mother and baby groups. Some men felt that it was culturally and socially unacceptable to talk negatively about fatherhood experiences or to admit to experiencing difficulties: '… feel a bit ridiculous if you're saying, 'Oh no, I'm finding it really difficult" [Sam].

There was also a general fear of being perceived negatively by work colleagues, friends and family if a mental health problem was identified, as men referred to the stigma of mental health:

> I guess, it's that fear of worrying about well, if you went and then seek help, how would your company see that? How would your friends and family see that? Is that something you want to disclose? … I think that sometimes can be the making or breaking point for someone where, if you do need to seek the advice, but you don't because of other fears, it then means that you're learning to cope with it in different ways [Ravi].

Men's perceived needs: what fathers want

Better preparation for fatherhood

The men interviewed wanted to be better educated on what to expect during their partner's labour, and their role as a birth partner. They described needing more information on the physical and emotional demands of parenthood in the early days and weeks after birth:

> if, you know, you had someone who said I know you would've heard this before, but there will be a serious lack of sleep, to the extent that you will feel quite disorientated. You may have times where you struggle to bond with the child. You just need to be aware that that is very normal. [Sam].

Some felt it would be helpful to have antenatal classes with a specific focus on dads, either delivered together for couples or for fathers only [Ahmed].

Better access to information and services

Men wanted access to correct, relevant and up-to-date information on the practical aspects of infant care, the challenges relating to new parenthood and to know what support services were available specifically for dads. Although men accepted being excluded by health professionals, they felt that they should be asked about their own mental health and wellbeing and offered the same level of support as women. Most said they would be willing to speak to health professionals about their mental health and considered that it would be better to be given an opportunity to seek help, rather than face having to deal with it themselves:

> 100%, I would, yeah. I'd rather talk about it than bottle it up … I'd rather have the help from the get-go, than trying to figure it out myself and then stress myself out about it [Lloyd].

New fathers wanted information about 'signs' and triggers of mental health problems so that they knew 'trigger points at which you may want to, kind of, talk to somebody about it to, kind of, relieve some of your stress' [Neil].

This was particularly important for some men who felt that rather than disclose their own difficulties in front of their partner, they would prefer to have the information at hand and able to contact a health professional independently.

However, it was apparent that the men interviewed would only feel able to disclose any mental health difficulties if they knew that the health professional contact and/or assessment would include their needs and not just those of their partner and baby. Adrian described:

> if I'd known that … was the focus of their visit or what have you, then maybe, yeah. But I feel like, it's - you feel it's light conversation most of the time, so you're like, 'Oh yeah, yeah, I'm fine', you know? [Adrian].

Being given an opportunity to ask health professionals questions was important as another father explained:

> if the midwife comes, …even if it's a five min slot, just to have a catch-up with the dad, just to see, do you need anything? Are you doing this? …One maybe even if it's a minimum, they feel included or two that there's an opportunity to ask questions, that they might be nervous about. [Ahmed]

A number of factors were identified that fathers interviewed considered could facilitate better access to support for new dads' mental health and wellbeing. They included: knowing where to go for help, more joined up health services, father-focused information and leaflets, hospital provision for fathers on labour wards (for eating, sleeping, washing), more emphasis and priority placed on men's health by health professionals, antenatal classes to include issues fathers may face in the postnatal period, fathers to be asked questions about their own wellbeing, regular checks for fathers during the perinatal period (by health professionals) and weekend or evening antenatal appointments/parentcraft sessions for working fathers. Having the flexibility in the workplace to attend antenatal appointments was identified as a facilitator for fathers to feel more involved.

A variety of sources of support throughout the perinatal period

When asked about sources of support, the men interviewed wanted support for their mental health and wellbeing, as well as practical aspects of caring for their partner and baby to be available in a variety of formats. This included face-to-face contacts with health

professionals, leaflets, online resources, support groups, apps and telephone advice. Support offered face-to-face or by telephone contact was preferred and seen as ideal, as Charlie explained: '… the more, sort of, personalised the contact, probably the better'. Written information needed to be brief, concise and to the point. Men also saw the value of fathers' support groups where they could learn and feel supported by more experienced fathers.

Most of those interviewed considered that this support should be available to fathers throughout the perinatal period, not just during their partner's pregnancy:

> Well, I think it during all the process, because it's important to know what is the next step you have to take and yeah, once you have made that next step, you need to know [laughs] what is the next one? So, this is a continual - continuous process [Miguel].

DISCUSSION

This study explored the needs and experiences of a diverse group of first-time fathers, during their transition to fatherhood. It is unique in that it explored men's own perceived needs and how they would like to be supported during and beyond their partner's pregnancy. Findings highlighted the changes and challenges new fathers experienced and impacts on their mental health and wellbeing, some of which were similar to previous studies as discussed below. New findings with respect to the level of support first-time fathers wanted from health professionals and the timing of this add to the evidence, with important implications for how perinatal and early year's services should be designed and provided for new parents.

This study identified that new fathers gave a significant amount of thought both before and after their baby's birth to 'fatherhood' and what it meant for them. The fathers interviewed thought about their own and their partner's mental and physical health, and their role and responsibility as a father. They were willing to approach and use health services but were unsure if this was appropriate or if the health professionals they consulted would have the relevant skills and knowledge base to deal with fathers' mental health. That new fathers feel excluded by health professionals and unable to access appropriate information has been previously reported.[24 30–35] Questioning the knowledge-base of family doctors and health visitors in relation to fathers' mental health reported in this study was highlighted by Rowe *et al*, in an Australian study of 22 women and 16 men, where fathers suspected that the primary care health professionals were 'not qualified to emotionally help you' because their training prepared them to treat physical not mental illnesses (Rowe et al, p50, 51) [36]. This suggests a need for health professionals providing care during and after pregnancy to inform new parents about their clinical role in supporting mental and physical health, so that both parents know what to expect from them. Another gap in services related to the lack of adequate facilities for fathers in hospital labour wards, which was previously reported by Symon *et al*[37] in a survey of the experience of maternity environment and care involving 515 couples across nine maternity units in England. Further work is needed which specifically considers how fathers are treated on labour and postnatal wards, with an aim to improving resources and space for expectant and new fathers so that they, in turn, feel better able to offer appropriate emotional and practical support to their partners.

When it came to accessing support for the father's own mental health and wellbeing, most of the men interviewed would only approach health professionals as their last 'port of call'. Family doctors (GPs) would be their health professional of choice to approach, although this was likely to reflect that the fathers interviewed were unaware which other health professional was the most appropriate to seek help or advice from. Although the fathers interviewed 'accepted' being excluded by health professionals, they wanted to be asked questions regarding their own mental health and wellbeing, and to be offered the same level of support as women. Most fathers would be willing to speak to health professionals about their mental health if they knew that the service was available for both parents.

Evidence from the current and earlier studies highlights that if relevant health professionals fail to engage with fathers throughout the perinatal period, or only occasionally casually enquire about the father's health and wellbeing, they will not identify the father's mental health needs. However, if they make a point of specifying that they are there to support and consider a new father's mental health and wellbeing as well as the woman's, they may be more likely to get a response, as a father may feel more comfortable to talk about his feelings. This has major implications for the planning and content of health professional's contacts during the perinatal period which need to be more family/parent focused, rather than focused primarily on the woman and infant. Health professionals' apparent limited experience of prioritising fathers' health needs, and inability to assess fathers' mental health and wellbeing, means that men who are experiencing mental health problems are unlikely to be identified, as described in previous studies.[38 39] Both these studies suggested that fathers should be routinely assessed for postnatal depression and that health professionals need to be adequately skilled to working with and identifying depressive symptoms in fathers.[38 39]

Similarly, some studies have highlighted training needs for health visitors with regard to working with fathers to better support their mental health and wellbeing.[40 41] In a study of two focus groups (each comprising six health visitors), Whitelock[41] identified a lack of training around fathers' mental health; a lack of confidence; fears of own safety; and a lack of policies to screen fathers' mental health as barriers that prevented health visitors from assessing new fathers' mental health and wellbeing. Similarly, Oldfield and Carr[40] in a qualitative interpretative phenomenological

analysis study of three student health visitors reported that paternal mental health was not addressed in their training, resulting in the students feeling inadequately prepared to support fathers in practice. To provide the level of support identified by the fathers interviewed in this study, health professionals would need in-depth understanding of fathers' mental health and wellbeing needs, and confidence and skills to assess and support their mental health. This suggests that there is a need to ensure fathers' mental health is incorporated in student training and made available as post-registration training for all professionals involved in working with parents during the perinatal period.

Few studies to date have explored what type of support fathers would like during the perinatal period. Fathers in this study reported various levels of support relating to their preparation for fatherhood, and wanted better preparation for the birth and parenthood, similar to that of the findings of our recent systematic review.[22] They particularly wanted 'frank discussions' about the difficulties they may face in early parenthood (such as sleepless nights, exhaustion, relationship changes) and what to do when 'things go wrong'; for example when men were not able to support their partner through breastfeeding difficulties or when they did not feel an instant bond with their baby after birth, they described feeling 'useless' and as 'bit of a spare part', feelings which have also been previously reported.[42 43] Similarly, during their partner's pregnancy, some men experienced increased stress due to negative feelings about the pregnancy, the upcoming birth and the first weeks of fatherhood, consistent with other studies.[44 45] As high anxiety or depressive symptoms during pregnancy are the most significant predictors of depression in men in the postnatal period,[46] the need for better information and support for expectant fathers in the antenatal and early postnatal period is crucial. The findings of this study suggest that providing fathers with adequate information in the antenatal period to help them better prepare for changes and challenges ahead is likely to make their transition to fatherhood much more positive and may reduce their stress levels. While some literature suggests that men may show a preference for father-only groups, this is unlikely to be sustainable in the UK NHS, due to cost and staffing resources.[47] Findings from a survey of 69 expectant fathers from five different ethnic minority groups in London reported that the majority of fathers favoured joint antenatal sessions with their partner over male-only classes, and there was no preference for a male facilitator.[48] Recommendations from a large literature review by the Movember Foundation suggest that staff characteristics, skills and qualities such as being non-judgemental, male positive and empathic to men's needs are far more important than the sex of the staff.[49] Therefore, in order to work successfully with fathers, practitioners have to consider addressing fathers needs as men, as well as fathers (similar to the way in which a family-focused approach is used with women) and not just as child carers.[50]

The first-time fathers interviewed, not unexpectedly, described tiredness and exhaustion following the birth of their child, and struggles relating to balancing conflicting demands, such as spending time with their child and having to go to work, which confirms previously reported findings.[2 22 30 42 51 52] Fathers in this study described a sense of accomplishment and growth relating to new fatherhood, and often feeling conflicted between wanting to 'be there' for their partner and adequately fulfil the financial provider role as a father. The concept of 'good fathering' and fulfilling their role as 'men' has been linked to men's ability to financially provide for their family, forming part of their identity and self-worth.[22] The impact of the conflicting aspects of 'fatherhood' and internal struggles new fathers experience are important considerations to understand first-time fathers' mental health and wellbeing.

Relationship changes with their partner were of concern for some of the men interviewed. However, these changes were seen as temporary or indicated a shift or 'change' in their relationship as the couple became parents. A positive finding was that the majority of those interviewed described their relationship with their partner as stronger since the birth of their baby. This contrasts with the systematic review findings where a deterioration in couples' relationships following the birth was reported[22]; however, this may reflect different populations studied. For example, this study only recruited 'well fathers' (with no history of severe mental illness), all of whom were in couple relationships at the time of interview and possible that while some men talked about 'arguing more' after the birth of the baby, most coped well due to their strong relationship as a couple. It was apparent that those who described their relationship as becoming stronger were working together to fulfil the duties of early parenthood. According to Houts *et al*[53] relationship deterioration is highest among couples 3 months after birth as they are more likely to use destructive (negative escalation, use of threats and coercion) problem solving methods rather than constructive (remain engaged, issue focused and concentrate on negotiation) problem solving methods. In this study the majority of fathers were interviewed prior to 3 months following the birth of the baby, which could further explain positive findings on reported couple functioning.

A number of barriers were identified to first-time fathers accessing support during the perinatal period, including gaps in service, not being informed about the services available for fathers, being excluded by health professionals, inflexible working practices and self-imposed barriers. Father also wanted information about 'signs' and triggers of mental health problems so that they knew when to access help. These findings suggest that new fathers need to be provided with adequate information about perinatal mental health, what services are available, how to access them and which professionals they could approach for additional support.

This study identified a number of facilitators for better access to support for new fathers. New fathers wanted

support to be available in a variety of formats, with face-to-face or telephone contacts being ideal. Most men stated that support should be available to fathers throughout the perinatal period, especially from the third trimester of the pregnancy until the first few months after birth. Fathers' mental health and wellbeing needs therefore need to be considered by health professionals who provide care to women throughout the perinatal period.

Study limitations included that only volunteer first-time fathers participated, which may have resulted in recruiting those who were specifically interested in the topic area; with new fathers from lower socioeconomic groups, unemployed and younger fathers (under 20 years) under-represented. It is recognised that fathers from these groups may have variable experiences during the perinatal period, which were captured in this study. Younger fathers (under 20 years) however only make up 1.1% of all fathers in England and Wales,[54] which may explain under-representation of this group in the study.

Although all fathers included in the study had a child less than 12 months of age, it is acknowledged that the first 12 months could encompass variable postpartum experiences. Most interviews (17 out of 21) were conducted in the first 3 months following birth. Of the remaining four, two took place between 4 and 6 months postpartum and two between 7 and 9 months. Findings however provide an insight into how first-time fathers could be better supported during their transition to fatherhood, and why this is important.

There were no substantive patterns identified between the different groups of fathers. For example, there were no obvious linkages noted for ethnicity, age, income or education of participants. Resident and non-resident fathers interviewed highlighted broadly similar needs, as did fathers for whom English was a first language and those for whom it was not. As this study only included first-time biological fathers, the mental health and wellbeing needs and experiences of subsequent fathers, and non-biological fathers remain unknown, areas which need to be addressed in future research.

Study findings have important implications for policy makers. Men's perinatal mental health is currently not accorded the same priority as maternal mental health. Although this has been overlooked until recently, in what is being called a 'landmark move', NHS England announced as part of their 'Long Term Plan', 'Fathers/partners of women accessing specialist perinatal mental health services and maternity outreach clinics will be offered evidence-based assessment for their mental health and signposted to support as required' (NHS, p 49) [55].

While this is a move in the right direction, this study suggests *all* fathers need routine assessment and support for their mental health and wellbeing during the perinatal period, not just those whose partners are unwell.

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5.5 Methods

Paper 2 (Baldwin et al., 2019), outlined that a pragmatic approach was used to select the most appropriate qualitative method to meet the aims and objectives of this study. The following sections provide detail of considerations of different qualitative approaches which could have been selected, prior to deciding on the approach finally used.

Choosing the right qualitative approach was important in ensuring the research aims were met and questions adequately answered. As the main aims of this study were to elicit the perspectives of first-time fathers' mental health and wellbeing, including their thoughts, emotions, and feelings, initially a methodology that focused explicitly on individual experiences, was considered. Phenomenology was thought to be the 'best fit' as it would enable the researcher to identify the essence of human experiences about a phenomenon, such as the transition to fatherhood, as described by the study participants in the study (Creswell, 2014). The notion of fatherhood is considered a social construct (Mead, 1969), based on the ontological belief that multiple realities of fatherhood are constructed through individual father's lived experiences, their interactions with others and historical and cultural norms that operate in individuals' lives (Creswell, 2003). It was thought (by the researcher) that this philosophical framework would allow the exploration of fathers' individual interpretations of their lived experiences and the ways in which they express them (Parahoo, 2006). Furthermore, phenomenological approaches emphasize the importance of personal perspective and interpretation, and epistemologically based in a paradigm of personal knowledge and subjectivity. As the interpretive and exploratory nature of the research questions seemed consistent with a phenomenological research tradition rather than that of generating theory or explanatory models, a grounded theory design was ruled out at this stage.

Further exploration of the study aims suggested that a more pragmatic approach was necessary, whereby the method was selected based on the research questions rather than because it aligned with a specific

epistemological stance (Ritchie et al., 2014). The aim of the current study was to gain a broader understanding of first-time fathers' experiences, including those from different backgrounds to reflect diversity in ethnicity, age, religion, age at leaving education, and social class, requiring a relatively large dataset. In phenomenological studies such as Interpretative Phenomenological Analysis (IPA) smaller samples are normally used (Pietkiewicz and Smith, 2012), which did not fit in well with the aims of the current study.

Following further consideration, a decision was made to use a qualitative approach informed by Framework Analysis. Framework Analysis was developed by UK social policy researchers in the 1980's (Ritchie and Spencer 1994, Ritchie et al., 2003) as a pragmatic approach for real-world investigations. It is a data analysis method rather than a research paradigm, and increasingly used in healthcare research settings such as nursing (Olson et al., 2018), midwifery (Wadephul et al., 2018), and health psychology (Parkinson et al., 2016). Its ontological position adheres most closely to 'critical realism' (Robson, 2002), which maintains that reality exists independently of individual subjective understanding but is only accessible via the perception and interpretations of individuals (Ritchie et al., 2003).

Critical realism is a philosophical framework which reflects positivist and constructivist approaches to provide a detailed account of ontology and epistemology (Brown et al., 2002). The ontological realism perspective holds the belief that there is a real world that exists independently of our perceptions and theories, whereas the perspective of epistemological constructivism is that our understanding of this world is our construction, rather than a purely objective perception of reality, and no such construction can claim absolute truth (Barnard, 2012). Fatherhood being a social construct (Mead 1969), epistemologically can be understood through the constructions of individual father's experiences and interactions within their cultural context (Creswell, 2003). The critical realism approach would help explain the diverse and multifaceted experiences and events relating to men's transition to fatherhood

and suggest practical policy recommendations to address the socially constructed problems (Fletcher, 2017).

Another reason for choosing framework analysis over other methods was that it would allow the categories and themes identified in the qualitative systematic review to be explicitly and systematically considered, while facilitating sufficient flexibility to detect and characterize new themes emerging from the data (Dixon-Woods, 2011).

5.6 Participation and Data Collection

As mentioned in Chapter 3, initially qualitative interviews and focus group methods were explored, but feedback from a local fathers' group in a Children's Centre who provided expert PPI during the initial design of the study helped influence the chosen method. Qualitative interviews were chosen as they could produce data rich in nature; and due to the interviewer being able to assess the participant's level of understanding, reduce the danger of questions being misinterpreted (Polit and Beck, 2013).

All participation was on a voluntary basis, as outlined in the participant information sheet (Appendix – 5). The father's written informed consent was obtained (Appendix - 8) (see Chapter 3).

In-depth interviews were carried out with 21 first-time fathers as this was when data saturation was reached. With respect to achieving data saturation, while there are no definitive numbers, according to Green and Thorogood (2009, p-120), "*the experience of most qualitative researchers is that in interview studies little that is 'new' comes out of transcripts after you have interviewed 20 or so people*". This has been described further in the data analysis section (Section

5.7). The topic guide used for the qualitative interviews is included in Appendix – 18.

5.7 Data Analysis

Data were analysed using Framework Analysis and the five steps of data management for thematic analysis as described by Ritchie et al. (2014). Further details are outlined below.

Familiarisation

This was the first step in the analytical process, to gain an overview of the data coverage and become familiar with the content. It involved listening to the interviews, and repeated reading of transcripts to identify topics or issues of interest and recurrent across the data set. By the process of “immersing” in the data, researchers can ensure that the subsequent labels that are developed are grounded in and supported by the data (Ritchie et al., 2014). This was carried out after conducting 15 interviews as the initial plan was to recruit between 15-20 first-time fathers. Setting an initial analysis sample can help to provide a ‘stop-point’ to assess whether data saturation has been reached and if not, how many additional participants may be required, providing a transparent process for making judgments about data saturation (Francis et al., 2010).

According to Srivastava and Thomson (2009), it is not necessary to review every set of data at this stage, as qualitative research usually yields large volumes of data. However, in this case the researcher felt that the sample size was small enough for all transcripts to be studied and this would be a necessary step in deciding whether data saturation had been achieved. This process yielded several themes, which were discussed with the researcher’s supervisors in regular meetings. A sample of transcripts was given to one of the researcher’s supervisors (DB) to review, to improve consistency and rigour of the initial themes and concepts identified. These themes were then checked against the interview topic guide and study objectives, resulting in the

development of a set of preliminary codes for different aspects of first-time fathers' experiences. An example of some of the initial codes with illustrative extracts from the data are presented in Table 7.

At this stage it was noted that majority of the participants in this sample were from one NHS trust and therefore it was planned to continue to recruit and interview participants to ensure that a comprehensive understanding of first-time fathers' views and experiences could be captured from men in both participating NHS sites. After completing 18 interviews, the researcher noted that no new themes or codes were emerging from the interviews, however a further three interviews were carried out which confirmed that the content domain of the construct had been adequately populated.

Table 7: Initial codes relating to first-time fathers' experience of their transition to fatherhood, with example quotations

Initial codes	Extract from transcript
Excitement & apprehension about becoming a dad	"Excitement was probably the first thing that I felt and then [laughs], it was a little bit of, kind of, apprehension, as in how – what will I need to, kind of, do in terms of being a dad, and will I be able to, kind of, cut the mustard, in terms of being a dad, and that type of thing." (Neil, pg-1) "I was happy, excited, bit of nervousness, because when you come to know right from the pregnancy 'til the baby's born and there's a different phase of women that they go through …." (Jay, pg-1)
Did not feel real	"To be honest, I didn't because it didn't feel real. Even though the baby was there, you can see the bump, you can see, you know, the baby moving around inside, to me, it wasn't there." (Dev, pg-2) "It's because, again, like I said, for me, it doesn't feel real. Like, it goes back to that scan, like, 15 minutes it's real and then you have your second scan and that part's real. But then, like, everything in-between is – like, she's going for appointments, but I don't go

	to them 'cause you have to go to work and stuff." (Arjun, pg-6)
Need to look after/ protect partner	"It was in that sense that you need to take good care of your partner, make sure that along with your work, you are giving her the time, support, as well as making sure that her basic needs are fully met". (Jay, pg-1)
Increased responsibility	"I'm feeling a bit, like, you know, that responsible person. Because if I was married and we are just two, we're just living happily this and that, but when the new baby comes and I'm feeling more responsible, because the – I need to look after her as well." (Dev, pg-1) "So, it's a responsibility from the day one, I would say". (Jay, pg-2)
Antenatal preparation	"It was more, kind of, the practical side of things that you would need to do and how to, kind of, look after a little one, and that type of thing. So, I don't think it was ever, kind of, focused around the social, mental aspects of it. It was more, kind of, focused around the practical sides of things." (Neil, pg-2-3)
Challenges of the early fatherhood	"….so, you know, lack of sleep, you know, that - my first week back at work and I'm there falling asleep on my desk." (Krish, pg-6) "it's all that, sort of, balance that I'm - you know, I'm really, sort of, anxious about how to best make it work. Yeah, it's - so, I suppose it's more like, professional career base alongside being a parent." (Adrian, pg- 24)
Coping with challenges	"It was just one of those things where you just have to, kind of, get on with it because you don't really have time to think." (Neil, pg-3) "You just have to - like I say, you just have to, kind of, put in coping mechanisms of mindfulness, of thinking of the girls' future and think, well, you know, you're doing it, you're managing, you're trying. It's sometimes hard because you know you can't communicate with them. It's difficult, but you try your best, I guess." (Ravi, pg-17)
Fathers want more information	"[Information] …about the types of things that go wrong and what you may need to do, kind of, as a dad to, kind of, support your wife, in terms of taking her through those changes that are going on, 'cause, I guess, the other thing was that she, kind of, became incredibly sore, as she was breastfeeding."

	(Neil, pg-5)
Online support recommended by health professionals/ NHS	"…then there was, kind of, lots of forums and they all, kind of, provide different information. So, having something that's, kind of, recommended by Physicians, Nurses, or something like that, would definitely be helpful." (Neil, pg-5)

At the end of the familiarisation process a set of 59 preliminary codes relating to first-time fathers' experiences of their transition to fatherhood were identified (Table – 8). These were used in the next steps to label, sort and compare the data.

Table 8: Preliminary codes for first-time fathers' experiences of their transition to fatherhood

1.	Excitement
2.	Looking forward to it
3.	Apprehension, self- doubt, nervousness
4.	Not real
5.	Shock
6.	Need to look after her, protect partner
7.	Difficulties with breastfeeding
8.	Father's role in breastfeeding unclear
9.	Not knowing about the needs of the new-born
10.	Missing sleep, missing meals
11.	Exhaustion & tiredness
12.	More cranky
13.	Lack of time for self, low priority for own needs
14.	Battle on with struggles/not share
15.	Changes to lifestyle
16.	Unpredictable circumstances
17.	Give up own activities
18.	Changes to social life
19.	Not enough time to bond with baby
20.	Less time spent with partner
21.	Perceived as positive stress
22.	Changed mind set
23.	Just get on with it

24.	Personal growth
25.	Need to improve self
26.	Baby main priority
27.	Looking to the future/ planning baby's future
28.	Learn as you go along, trial & error
29.	Learn from challenges
30.	Stronger bond with partner, work in partnership
31.	Partner more irritable/ tired
32.	Argue more with partner
33.	Partner's focus more on baby
34.	Support from partner
35.	Support from friends
36.	Support from family
37.	Antenatal classes
38.	Health professionals
39.	Internet for support
40.	Not knowing what is available/ how to access support
41.	Lack of information aimed at fathers
42.	Not involved by health professionals
43.	Not asked about own wellbeing by health professionals
44.	Work commitments/ inflexibility
45.	Better preparation for fatherhood needed
46.	Want information about what to expect with a new baby
47.	Want more practical information about the early days
48.	Information on what to expect in relation to own feelings
49.	Discussions about mental health
50.	More information about breastfeeding and fathers' role
51.	Information on services available to new fathers
52.	Face to face support by health professionals
53.	Opportunity to be seen by health professionals separately and with partner
54.	Concise information in leaflets or apps
55.	Online support recommended by health professionals/ NHS
56.	Fathers' groups
57.	Information during pregnancy
58.	Support throughout
59.	Support in the early days after birth

Constructing an initial thematic framework

The aim of this step was to construct an initial thematic framework for organising the data by grouping together themes that linked to particular items, and sorting to different levels of generality (Ritchie et al., 2014). The 59 generated codes were sorted into a hierarchy of themes and subthemes to construct an initial framework for use across the data set. It was important to identify categories that offered best fit for the generated data and to answer the research questions. According to Saldana (2009), researchers often end up with five to seven main themes, under which more detailed subthemes are nested. To ensure all research objectives were met, in this case the initial framework consisted of nine main categories, with several subthemes for each, as shown in Box - 1.

At this stage, the framework developed was very much focussed on data management (for the purpose of sifting and sorting), rather than ‘mapping and interpretation’ (for the purpose of making sense and understanding). The developed framework was then piloted on five interviews, after which the framework categories were created on NVivo (version 11) and all interview transcripts uploaded for analysis.

Box 1: Constructing an initial framework with themes and subthemes

1. Background
1.1 Age
1.2 Baby's age
1.3 Borough of residence
1.4 Education level
1.5 Employment status
1.6 Ethnicity
1.7 First Language
1.8 Income
1.9 Profession / Job
1.10 Religion
1.11 Resident or non-resident father

2. Antenatal Preparation
2.1 Method of preparation
2.2 Negative aspects of antenatal preparation
2.3 Positive aspects of antenatal preparation
2.4 Challenges of antenatal period

3. Feelings about becoming a father
3.1 Negative feelings
3.2 Positive feelings
3.3 Unreal
3.4 Mixed feelings
3.5 Protective

4. Impact
4.1 Self
4.2 Partner
4.3 Baby

5. Labour & birth
5.1 Preparation for labour & birth
5.2 Challenges during labour & birth

6. The postnatal period
6.1 Changes
6.2 Challenges
6.3 Coping mechanisms

7. Support mechanisms
7.1 From partner
7.2 From family
7.3 From friends
7.4 From health professionals
7.5 From online resources

8. What fathers want
8.1 Type of information & support
8.2 Sources of information & support
8.3 Timing of information & support
8.4 Discussion about own wellbeing with health professionals

9. Barriers & facilitators to accessing support
9.1 Barriers
9.2 Facilitators

Indexing and sorting

This step of the process was to find out "*what parts of the data are about the same thing and belong together*" (Ritchie et al., 2014, p-282). This involved systematically reading each section of the transcript in detail, applying labels to chunks of the data with the same meaning and deciding which category (or categories) from the framework to assign text to. Using NVivo, the selected (highlighted) text was 'dragged and dropped' into the relevant category/ subcategory. This process was followed for all of the transcripts. One advantage of using NVivo was that after indexing the transcript, it enabled the extraction of all data coded to a category for a specific participant, group of participants, or all participants, which facilitated many potential avenues for exploration in the later stages of data analysis.

After the indexing process, data were sorted so that material with similar content could be viewed as a whole. Using thematic references, all the data that

had been indexed in the same way were brought together to create a number of thematic sets. This allowed the researcher to focus on each topic in turn so the detail and distinctions that lie within could be further be explored.

Reviewing data extracts

The aim of this stage was to review the indexed data to determine whether there were other ways of organising the data to produce more coherent groupings. By reading through the 'piles' of indexed data, the coherence of data extracts was assessed to see whether they were about the same thing and if further amendment was necessary to the assigned labels. This was also an opportunity to examine the sections of data not indexed to make sure there were no other important themes missing from the framework.

Data summary and display

This was the final stage of the data management process, where the indexed data were organised by theme and by participant, into a set of matrices. Once the main themes and subthemes were reviewed and finalised, a matrix was created for each theme, with individual columns for the subthemes, using NVivo. The first column of the matrix contained case identification details (demographics), followed by summaries of individual themes in subsequent columns. When summarising the data for each theme it was important to retain the context and essence of the issue without losing the voice of the participant. This was done by ensuring the participant's own language was used as much as possible, without trying to interpret the meaning of the points made at this stage. This step reduced the amount of material to a more manageable level as well as prepare the data by case and theme, for the interpretive analysis that followed.

Abstraction and interpretation

Following the five-step data management process, the data were categorised and classified to form the main findings of the research in the abstraction and interpretation stage.

The first step of this process was to try and understand what was happening within each theme or subtheme. Taking each theme in turn, all the relevant data extracts were reviewed, and the range and diversity of views, experiences and behaviours of first-time fathers noted. Following this a list of elements present in the responses were detected. Once the elements for each theme and subtheme were identified, they were sorted according to their underlying dimensions as illustrated in Box - 2 below (for 'Challenges in the Postnatal Period').

Box 2: Detecting elements and dimensions: Challenges in the Postnatal Period

A Detecting elements across the data set for Challenges in the postnatal period	B Key dimensions
– Changed mindset – Want to do more and achieve more – Having a baby is all about manning up – Desire to do more – Do more at work – Wanting child to follow in the father's footsteps – Changes your outlook on how you look at things – Moves you away from being such a control freak – Get a different perspective of life – Need to plan for the future – Increased responsibility – Helps you grow in life – Your whole world changes – New priorities	→ Changed mindset
– Become more disciplined – Loss of independence – Can't just pop out and do things – Can't go out with friends as much – Everything revolves around the little one	→ Changed lifestyle

- You'd rather be at home with the baby
- Set new boundaries
- Changes your lifestyle
- Hardly ever go out in the evenings

- Bigger financial strain
- Increased anxiety
- Lack of sleep
- Not getting time to yourself any more
- Culturally, it's not acceptable to talk too negatively about fatherhood
- Feel useless and like bit of a spare part when you can't stop the baby crying
- Not knowing what is the right thing to do and being able to do it

Challenges of fatherhood– Self

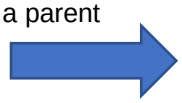
- Colic
- Not knowing what the baby wants
- Making sure baby is okay
- Concerned about missing out
- Worries about the baby's wellbeing
- Bonding experience with the baby is not there straightaway
- When the baby doesn't recognise you
- Not knowing how to help when baby is breastfeeding

Challenges of fatherhood - Baby

- Making sure partner is okay
- Worries about the partner's wellbeing
- Supporting partner with breastfeeding difficulties

Challenges of fatherhood - Partner

- Balancing professional career base alongside being a parent
- Going back to work
- Leaving partner and baby during the day



Challenges of fatherhood - Work

- Trial and error
- something inside you just clicks and you switch
- You just have to get on with it
- You've got to work it all out
- Have to just crack on and do it
- Do housework
- Mindfulness and thinking of the child's future
- 'Keep it to myself and battle it myself'
- Working together with partner
- Just have to get on with it because you don't have time to think
- Internet, friends and family

Coping strategies employed

Following this the data were further examined to combine the detected elements into categories. The initial categories developed were more descriptive, but were further refined after testing them in different groupings of elements, taking into consideration the study objectives and the phenomenon being explored.

As the nine categories were considered to be at a fairly descriptive level, further abstraction was carried out to take these categories into higher levels of generality to form more abstract categories, which resulted in five major classifications (see Table 9).

Table 9: Final categories and higher classification

Categorisation	Higher-order categorisation
1. Rollercoaster of feelings • Mixed feelings - Mixed feelings - Excitement & happiness - Apprehension & stress - Not real	**Transitioning to fatherhood - the journey**
2. Impact on health & wellbeing • Tiredness & exhaustion in early fatherhood • Increased responsibility & pressures • Negative emotional impacts	
3. Changed relationship • Relationship is completely different, we're in a different place – positive • Relationship is completely different, we're in a different place – negative	

<table>
<tr><td>4. New fatherhood Identity

• Sense of accomplishment & personal growth
- Sense of accomplishment
- New responsibilities
- Positive emotional impacts – Personal growth

• Changed person
- Changed mindset
- Changed lifestyle
- Changed priorities / focus</td><td rowspan="2">Rewards and challenges of new fatherhood</td></tr>
<tr><td>5. Rewards & Challenges

• Rewards

• Challenges in labour
- Lack of facilities for fathers on labour ward
- Challenges relating to labour

• Challenges in postnatal period
- Challenges – Self
- Challenges – Baby
- Challenges – Partner
- Challenges – Work</td></tr>
<tr><td>6. Coping and support

• Internal resources

• External resources
- Support from online resources
- Difficulties relating to seeking support from online resources
- Support from partner and working as a team
- Difficulties relating to seeking support from partner
- Support from family
- Difficulties relating to seeking support from family
- Support from friends
- Difficulties relating to seeking support from friends</td><td>Coping and support – self, family & friends</td></tr>
</table>

<table>
<tr>
<td>

7. Support

- Preparation for fatherhood
  - No preparation
  - Types of preparation
- Positives experiences of health services/ professionals
  - Helpful aspects of antenatal preparation
- Negative experiences of health services/ professionals
  - Unhelpful aspects of antenatal preparation
  - Perceptions
  - Involvement
  - Systems, Processes & Knowledge base
- Men's expectations, acceptance & reasoning for not being prioritised
- Access to support from health professionals

</td>
<td rowspan="2">Health professionals and services – experience, access and support</td>
</tr>
<tr>
<td>

8. Men's perceived needs

- Better preparation for fatherhood
- Access to support services
- Equal levels of support and services
- A variety of sources of support
- Support throughout the perinatal period
- Men's willingness to talk to health professionals about own mental health

</td>
<td rowspan="2">Perceived needs of new fathers</td>
</tr>
<tr>
<td>

9. Barriers and facilitators

- Facilitators
  - Current facilitators
  - Perceived facilitators (currently not in place)
- Barriers
  - Service gaps
  - Not being informed
  - Not being included by health professionals
  - Work commitments
  - Self-imposed barriers – stigma, fear & perception

</td>
</tr>
</table>

The further classification however, meant that the level of detail was not being captured in the higher order categories to be able to address the study objectives. It was therefore decided to go back to the previous stage of the categorisation process and use the nine categories already identified, which were further refined. There were several iterations of this process, before the final nine categories were developed and agreed by the research team, as shown in Box - 3 below:

Box 3: Final categories and subcategories

1. Preparation for fatherhood

2. Rollercoaster of feelings

- Mixed feelings
- Not real

3. New identity

- Sense of accomplishment & personal growth
- Changed person

4. Challenges & impact

- Challenges relating to labour & birth
- Tiredness, exhaustion & stress in early fatherhood
- Increased worries & pressure
- Emotional impact
- Rewards of fatherhood

5. Changed relationship: We're in a different place

6. Coping & support

7. Health professionals & services: experience, provision & support

- Experience
- Provision & support

8. Barriers to accessing support

9. Men's perceived needs: what fathers want

- Better preparation for fatherhood
- Better access to information & services
- A variety of sources of support
- Support throughout the perinatal period

Using NVivo, it was possible to refer back to the original transcripts for clarification and to look more in depth at interesting patterns in the data.

5.8 Results

Additional quotes for each theme, not included in the published paper due to the word limit, are presented in Appendix - 19. Pseudonyms were given to all participants in the illustrations used, to protect their identity.

5.9 Statement of the Contribution of the PhD Student to this Paper

All aspects of this study were carried out by the researcher (SB), including recruitment, data collection, data analysis and writing the first draft of the paper, with support from the supervisory team (DB, JS, MM). The findings of the study were discussed amongst the research team (all four authors) at each stage and there were several iterations of this process, before the final results were developed and agreed by all authors.

5.10 Chapter Summary

This chapter has presented the qualitative study carried out in *study phase II* of this thesis, to answer the second research question: *How do first-time fathers perceive their mental health and wellbeing needs during this transition?* Findings from this study and the systematic review in Chapter 4, will be explored further in the next chapter (Chapter 6), in relation to the intervention (Promotional Guide system). These findings will also inform the feasibility study and process evaluation in chapter 7.

CHAPTER 6: THE INTERVENTION

6.1 Introduction

As described in chapter 3, the Promotional Guide system is a complex intervention used with expectant and new parents (mothers and fathers) to help their transition to parenthood. This chapter begins with providing further details on how the intervention is used in practice. It then goes on to map the findings from study P*hases I and II* against the Promotional Guides and identify the key components of the intervention that may bring about change. In this chapter a theory of change was developed to provide a framework for evaluating the Promotional Guide system, and a logic model proposed to show how the intervention may improve first-time fathers' mental health and wellbeing during their transition to fatherhood.

6.2 Overview of the Promotional Guide System

To adequately describe the intervention, the 'Template for Intervention Description and Replication' (TIDieR) checklist was used (Hoffmann et al., 2014), taking into consideration the additional items suggested by Cotterill et al. (2018), discussed in Chapter 3. The full completed checklist can be found in Appendix - 20.

The Promotional Guide system consists of the Antenatal Promotional Guide, the Postnatal Guide, Antenatal topic cards, Postnatal topic cards, and the Family Strengths and Needs Summary. The guides are designed to enable parents and professionals to have a guided conversation. The antenatal guide consists of eleven topics and the postnatal of ten, as outlined in Table 10.

Table 10: Promotional Guide Antenatal and Postnatal Topics

Topic	Antenatal Promotional Guide	Postnatal Promotional Guide
1.	Your feelings about your pregnancy	Your labour, birth and delivery
2.	Your family and friends	Your emotional wellbeing
3.	Changing family life and relationships	Becoming a mum, dad and becoming parents
4.	Looking after yourself and your baby	Your family and friends
5.	Your unborn baby	Your baby's development
6.	Your labour and your baby's birth	Caring for your baby
7.	Becoming a mum, dad and becoming parents	Baby cues, getting to know your baby
8.	Caring for your baby	Your circumstances and community
9.	Your circumstances and community	Recent and past life events
10.	Recent and past events	Priorities, plans and support
11.	Priorities, plans and support	

For each topic, the guide outlines key facts, risk factors and factors promoting resilience, followed by topic prompts and actions. This provides professionals with practical guidance on how to explore each topic in detail during their guided conversation with parents and what actions they may need to take in order to address the issues raised.

For each promotional guide topic there is a topic card, which consists of a picture and title on one side, and topic prompts on the other, as shown below:

Figure 7: An example of Postnatal Promotional Guide Topic Card 3.

The antenatal and postnatal guides are used face-to-face, by trained health visitors and topic cards are used as conversational prompts to structure and facilitate 'guided conversations' with both mothers and fathers. Usually the health visitor lays out and explains each of the cards, inviting parents to select topics of the most immediate relevance and importance, which form the initial focus of the 'guided conversation' (Barlow and Day, 2016). One of the main strengths of these guides is the partnership approach, which allows mothers and fathers to influence the way in which the priorities are explored and addressed during the contact. As well as using the topic guides and cards, this intervention includes the completion of a ‘Family Strengths and Needs Summary’ (Appendix – 21). This summary outlines key antenatal and postnatal risk and resilience factors, which the health visitor completes with the family after each visit. This summary aids the process of partnership working, where the parents and health visitor works together to identify the family’s needs and agree an appropriate plan of action.

While the recommended time for using the Antenatal Guide is as early as possible in the second trimester, around 13-27 weeks gestation (Barlow and Day, 2016), in practice it is usually incorporated in the first health visiting contact known as the ‘Antenatal health promoting visit’ undertaken after 28 weeks of pregnancy (PHE, 2018b). Similarly, the use of postnatal guide is typically incorporated in the third universal health visitor contact, the 6-8 week

assessment, which is within the recommended timeframe of 4-8 weeks (Barlow and Day, 2016). Each Promotional Guide contact lasts around 60 minutes, and should ideally be delivered in the home setting.

6.3 Mapping Phase I and II Study Findings to the Promotional Guide System

Findings from *phase I and II* of this study (discussed in chapters 4 and 5) identified a number of needs relating to first-time fathers' mental health and wellbeing, as well as the information and support resources that would help improve men's mental health and wellbeing during their transition to fatherhood. These have been mapped against the promotional guide topics In Table 11, to ascertain whether this intervention has the potential to address the mental health and wellbeing issues raised by first-time fathers in this study.

The table below shows that the Promotional Guide system provides an opportunity to discuss and address all the issues highlighted by first-time fathers in phases I and II of this study.

Table 11: Mapping of the study findings from *phase I and II* against the Promotional Guide intervention

Study Phase	Study Findings	Key Concepts	Promotional Guides Topic
I	Health professionals should routinely inform and educate expectant fathers about the changes and challenges they may experience during their transition to fatherhood and offer information on where they could access appropriate resources and support.	- Better preparation for becoming a father - Exploration and management of expectations - Access to resources and support	• Your feelings about your pregnancy (AN Guide) • Your family and friends (AN & PN Guide) • Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide) • Your baby (AN & PN Guide) • Your labour and your baby's birth (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide) • Your emotional wellbeing (PN Guide) • Your circumstances and community (AN & PN Guide)

			• Recent and past events (AN & PN Guide) • Priorities, plans and support (AN & PN Guide)
I & II	First-time fathers must be better prepared for parenthood, with particular focus on difficulties associated with balancing competing demands.	- Better preparation for becoming a father - Exploration and management of expectations - Discussions around balancing competing demands	• Your feelings about your pregnancy (AN Guide) • Your family and friends (AN & PN Guide) • Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide) • Your baby (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide) • Your emotional wellbeing (PN Guide) • Your circumstances and community (AN & PN Guide) • Recent and past events (AN & PN Guide) • Priorities, plans and support (AN & PN Guide)

I	If fathers are adequately prepared, then they are likely to have more realistic expectations about what to expect following the birth, reducing the chances of disappointment in the postnatal period.	- Better preparation for becoming a father	• Your feelings about your pregnancy (AN Guide) • Your family and friends (AN & PN Guide) • Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide) • Your baby (AN & PN Guide) • Your labour and your baby's birth (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide) • Your emotional wellbeing (PN Guide) • Your circumstances and community (AN & PN Guide) • Recent and past events (AN & PN Guide)

			• Priorities, plans and support (AN & PN Guide)
I	Informing fathers about the importance of their involvement to the child's development and how rewarding this could be to them, could encourage new fathers to develop skills and self-confidence in their parenting.	- Better preparation for becoming a father - Information about child development and the father's role - Practical parenting skills	• Your feelings about your pregnancy (AN Guide) • Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide) • Your baby (AN & PN Guide) • Your labour and your baby's birth (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide)
I	Health professionals should focus on couple relationships, including potential changes to sexual relations, and discuss the	- Discussions around couple relationships and potential changes	• Your feelings about your pregnancy (AN Guide) • Changing family life and relationships (AN Guide)

	importance of this with both parents in the antenatal and postnatal period.	- Exploration and management of expectations	• Looking after yourself and your baby (AN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Your emotional wellbeing (PN Guide) • Recent and past events (AN & PN Guide) • Priorities, plans and support (AN & PN Guide)
I	Health professionals should provide new fathers with information about the labour and childbirth process, as well as advice on how they could feel involved with their partner and baby in the early and longer-term postnatal period.	- Education about labour and childbirth - How fathers can get involved during labour - How fathers can be involved in the early days after birth - Bonding with their baby	• Your feelings about your pregnancy (AN Guide) • Changing family life and relationships (AN Guide) • Your baby (AN & PN Guide) • Your labour and your baby's birth (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide) • Your emotional wellbeing (PN Guide)

			• Your circumstances and community (AN & PN Guide) • Recent and past events (AN & PN Guide) • Priorities, plans and support (AN & PN Guide)
I	Health professionals need to provide fathers with adequate support and resources aimed at reducing stress and improving mental health.	- Discussions and information resources about mental health and wellbeing - Practical tips on how to look after self	- Your feelings about your pregnancy (AN Guide) - Your family and friends (AN & PN Guide) - Changing family life and relationships (AN Guide) - Looking after yourself and your baby (AN Guide) - Becoming a mum, dad and becoming parents (AN & PN Guide) - Your emotional wellbeing (PN Guide) - Your circumstances and community (AN & PN Guide) - Recent and past events (AN & PN Guide)

			- Priorities, plans and support (AN & PN Guide)
I	Health services need to adopt a father-inclusive model for supporting new parents so that fathers feel acknowledged and adequately supported.	- Involving fathers in antenatal and postnatal contacts	- Your feelings about your pregnancy (AN Guide) - Your family and friends (AN & PN Guide) - Changing family life and relationships (AN Guide) - Looking after yourself and your baby (AN Guide) - Your baby (AN & PN Guide) - Your labour and your baby's birth (AN & PN Guide) - Becoming a mum, dad and becoming parents (AN & PN Guide) - Caring for your baby (AN & PN Guide) - Baby cues, getting to know your baby (PN Guide) - Your emotional wellbeing (PN Guide)

			- Your circumstances and community (AN & PN Guide) - Recent and past events (AN & PN Guide) - Priorities, plans and support (AN & PN Guide)
I	Expectant and new fathers should be offered practical advice, information and guidance around caring for their new baby, to include bathing, feeding and sleep routines for the baby.	- Better preparation for becoming a father - Information about child development and the father's role - Practical parenting skills	• Your feelings about your pregnancy (AN Guide) • Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide) • Your baby (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide) • Your emotional wellbeing (PN Guide)

II	New fathers wanted to be asked questions regarding their own mental health and wellbeing, and to be offered the same level of support as women.	- Discussions and enquiry about mental health and wellbeing - Support offered to fathers	• Your feelings about your pregnancy (AN Guide) • Your family and friends (AN & PN Guide) • Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Your emotional wellbeing (PN Guide) • Your circumstances and community (AN & PN Guide) • Recent and past events (AN & PN Guide) • Priorities, plans and support (AN & PN Guide)
II	Fathers wanted 'frank discussions' about the difficulties they may face in early parenthood (such as sleepless nights, exhaustion, relationship changes) and what to do when 'things go wrong'; for example when	- Better preparation for becoming a father - Information about changes and challenges in early fatherhood	• Your feelings about your pregnancy (AN Guide) • Your family and friends (AN & PN Guide)

	men were not able to support their partner through breastfeeding difficulties or when they did not feel an instant bond with their baby after birth, they described feeling 'useless' and as 'bit of a spare part',	- Where to access additional support - Exploration of expectations relating to breastfeeding, and bonding with baby. - Discussions about child development and the father's role - Practical parenting skills	• Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide) • Your baby (AN & PN Guide) • Your labour and your baby's birth (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide) • Your emotional wellbeing (PN Guide) • Your circumstances and community (AN & PN Guide) • Recent and past events (AN & PN Guide) • Priorities, plans and support (AN & PN Guide)

II	Practitioners have to consider addressing fathers' needs as men, as well as fathers.	- Involving the father - Enquiring about father's needs and providing support	• Your feelings about your pregnancy (AN Guide) • Your family and friends (AN & PN Guide) • Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide) • Your baby (AN & PN Guide) • Your labour and your baby's birth (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide) • Your emotional wellbeing (PN Guide) • Your circumstances and community (AN & PN Guide) • Recent and past events (AN & PN Guide)

			• Priorities, plans and support (AN & PN Guide)
II	Fathers wanted information about 'signs' and triggers of mental health problems so that they knew when to access help.	- Discussion and information about perinatal mental health problems, to include sign and symptoms. - Information about when and how to access support	• Looking after yourself and your baby (AN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Your emotional wellbeing (PN Guide) • Your circumstances and community (AN & PN Guide) • Recent and past events (AN & PN Guide) • Priorities, plans and support (AN & PN Guide)
II	Most men stated that support should be available to fathers throughout the perinatal period, especially from the third trimester of the pregnancy until the first few months after birth.	- Access to support throughout the perinatal period - Support from the third trimester of the pregnancy until the first few months after birth.	• Your feelings about your pregnancy (AN Guide) • Your family and friends (AN & PN Guide) • Changing family life and relationships (AN Guide) • Looking after yourself and your baby (AN Guide)

			• Your baby (AN & PN Guide) • Your labour and your baby's birth (AN & PN Guide) • Becoming a mum, dad and becoming parents (AN & PN Guide) • Caring for your baby (AN & PN Guide) • Baby cues, getting to know your baby (PN Guide) • Your emotional wellbeing (PN Guide) • Your circumstances and community (AN & PN Guide) • Recent and past events (AN & PN Guide) • Priorities, plans and support (AN & PN Guide)

6.4 Theory of Change (ToC)

To assess whether and how an intervention works, it is important to understand the underlying theory (Coryn et al., 2011). A ToC is a framework that provides a theory of how and why an initiative works (Weiss, 1995). It is defined as "*the description of a sequence of events that is expected to lead to a particular desired outcome*" (Davies, 2012, p-1). In other words, a tool that helps describe the problem being addressed, the expected outcomes and the activities needed to achieve those outcomes. ToC is a pragmatic framework which describes how the intervention affects change (De Silva et al., 2014), rather than a sociological or psychological theory such as personal construct theory (Kelly, 1955) or ecological theory (Bronfenbrenner, 1977). It can however incorporate relevant sociological or psychological theories to explain the particular mechanism of change (De Silva et al., 2014).

The Promotional Guide system, although an intervention designed for supporting the transition to parenthood, it was not solely developed to address fathers' mental health and wellbeing in the perinatal period. A ToC was therefore developed for the current study by the researcher to better understand how the intervention could potentially improve first-time fathers' mental health and wellbeing and the causal rationale underpinning the activities within the intervention. It was also considered to be a useful tool for unpacking the 'black box' of this complex health intervention in the evaluation process (De Silva et al., 2014).

It is being proposed that the Promotional Guide system has the potential to improve fathers' mental health and wellbeing during their transition to fatherhood through the following processes:

1. The intervention could allow fathers to discuss their experiences of fatherhood at two points in the perinatal period (antenatal and postnatal) and identify any difficulties they may face.

2. Using the guides, fathers' own strengths could be identified, which could help address any identified difficulties relating to their mental health and wellbeing.
3. The intervention could have a similar therapeutic effect on fathers, to that reported among mothers (Barlow and Coe, 2013).
4. The intervention could enable fathers to identify their need for additional mental health support, including need for referral.

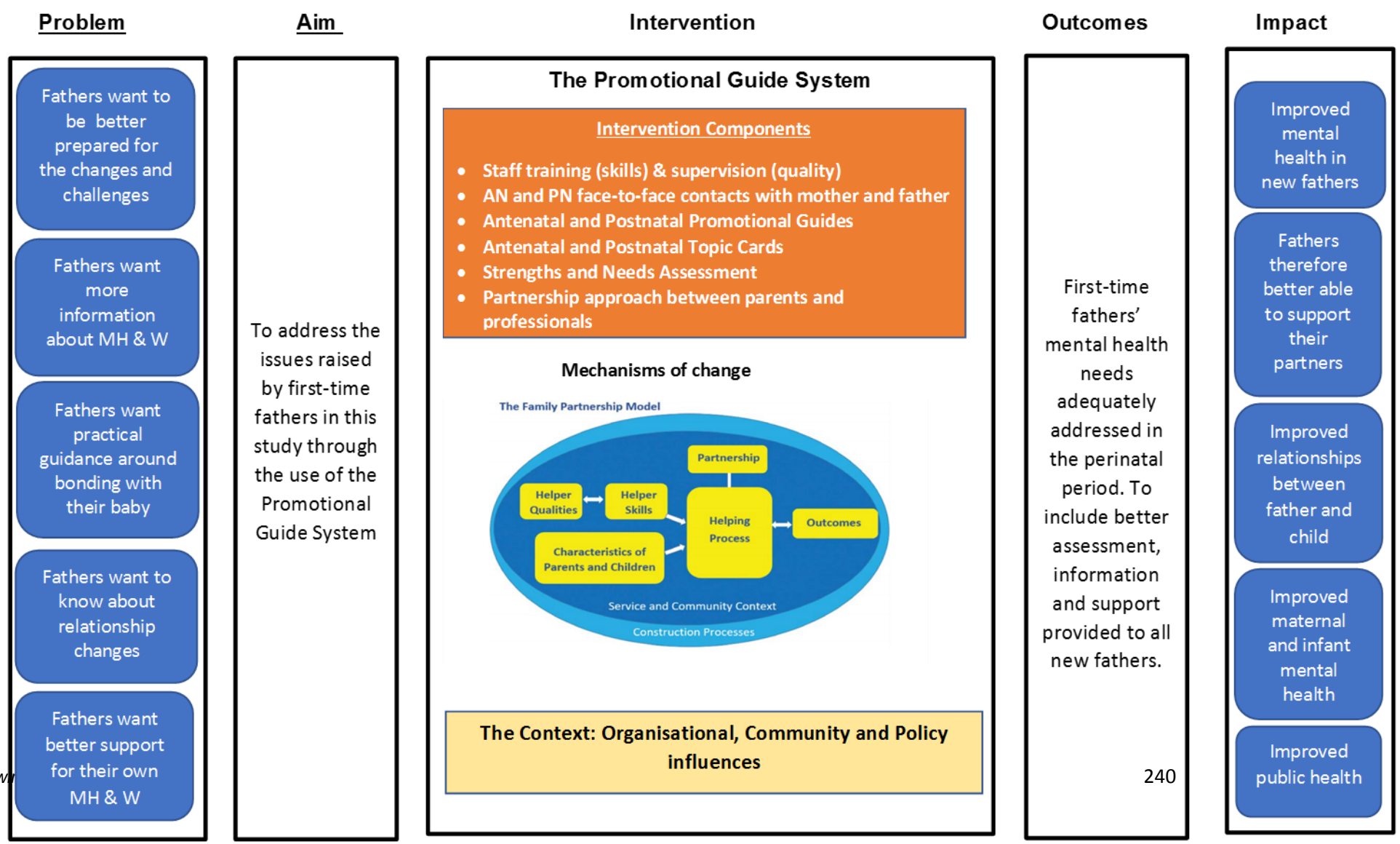
The Promotional Guide system is licensed by the Centre for Parent and Child Support, who require the professionals administering the guides to be appropriately trained and in receipt of regular supervision. Training and supervision of professionals is therefore essential for the effective and consistent delivery of this programme, as well as a face-to-face contact between the health professional and parents. All key components of this intervention have been identified and summarised in Box - 4.

Box 4: Key Intervention Components of the Promotional Guide System (Day et al., 2014)

Intervention Components
Staff training (skills) & supervision (quality)
Antenatal and Postnatal face-to-face contacts with mother and father
Antenatal and Postnatal Promotional Guides
Antenatal and Postnatal Topic Cards
Strengths and Needs Assessment
Partnership approach between parents and professionals

The ToC developed for the current study provides a visual representation of the causal pathways of the Promotional Guide system and includes the intervention content, key components, theoretical underpinnings, and study aims and objectives (Figure: 8). The process of development involved identifying the problem and needs of first-time fathers based on the findings from study *phases I and II*, the expected outcomes of the intervention and the mechanisms by which these outcomes could be achieved. The Family Partnership Model was incorporated, as it provided the theoretical underpinnings for the intervention, explaining the change mechanisms. A draft ToC was initially developed and consulted with the PPI groups (fathers and health visitors). Feedback received from these groups was incorporated to form the final version (Figure: 8). While it is acknowledged that other theories of change could be proposed for this intervention, this theory of change was developed specifically for the current study to help generate a better understanding of the mechanisms of change and provide clarity during the evaluation process in Chapter 7 of this thesis. It provides an overview of the identified problems, the aim of the project, how the intervention may work, the likely outcomes and long-term impact it is likely have.

Figure 8: Theory of Change (ToC) developed for the New Dad Study (NEST)



6.5 Logic Models for Interventions

In addition to the use of theory to describe potential change resulting from interventions, Moore et al. (2015) suggested that the use of logic models could support the reporting of assumptions about how the intervention works as it can illustrate how each input and activity undertaken links to the outcomes and resources required. A logic model is "*a graphic description of a system and is designed to identify important elements and relationships within that system"* (Anderson et al., 2011, p-34). In other words, it is a diagrammatic representation of either the problem and/or the intervention theory. The process of developing a logic model helps to define the various elements of an intervention, which creates the foundation for measurement and evaluation by setting out the relationships and assumptions, between what a programme will do and what changes it expects to deliver (Hayes et al., 2011). It can also highlight gaps between the ingredients of a programme, the underlying assumptions and the anticipated outcomes (Helitzer et al., 2010).

To meet the aims and objectives of the current study, a logic model was developed by the researcher in consultation with the PPI groups of fathers and health visitors. This was undertaken to help map out the evaluation plan for data collated on intervention processes, and the feasibility of undertaking a future trial (further discussed in Chapter 7) by identifying the following:

- The key outcomes needed to be measured to test the intervention theory and the tools required for this
- The key elements of the intervention to be implemented and by whom
- The resources needed for the implementation
- The target recipient of the intervention
- Any implementation challenges affecting the outcome

The logic model for the Promotional Guide system as an intervention which could potentially improve first-time fathers' mental health and wellbeing, was developed using a social ecological framework (Figure: 9). This model

(Appendix - 22) helped to understand factors affecting behaviour and the multiple levels of influence (such as individual, interpersonal, organisational, community and public policy). According to Lang and Rayner (2012, p-20), "*Public health professionals today need to think and act ecologically if they are to help reshape the conditions that enable good health to flourish*". The logic model developed (Figure: 9) adds to the theory of change developed by clarifying the assumptions about how the intervention may work and what changes it is postulated to deliver (Moore et al., 2015). While the ToC provides an overview and summarises the intervention at a strategic level, the logic model illustrates understanding of the change process at implementation level, focusing on a specific pathway within the theory of change. Without a logic model, there was potential risk of missing possible key mechanisms and outcomes of the Promotional Guide system in the evaluation, limiting the value of the evaluation (Gugui and Rodriguez Campos, 2007). Findings from the process evaluation has been mapped onto the logic model and discussed further in Chapter 7 of this thesis.

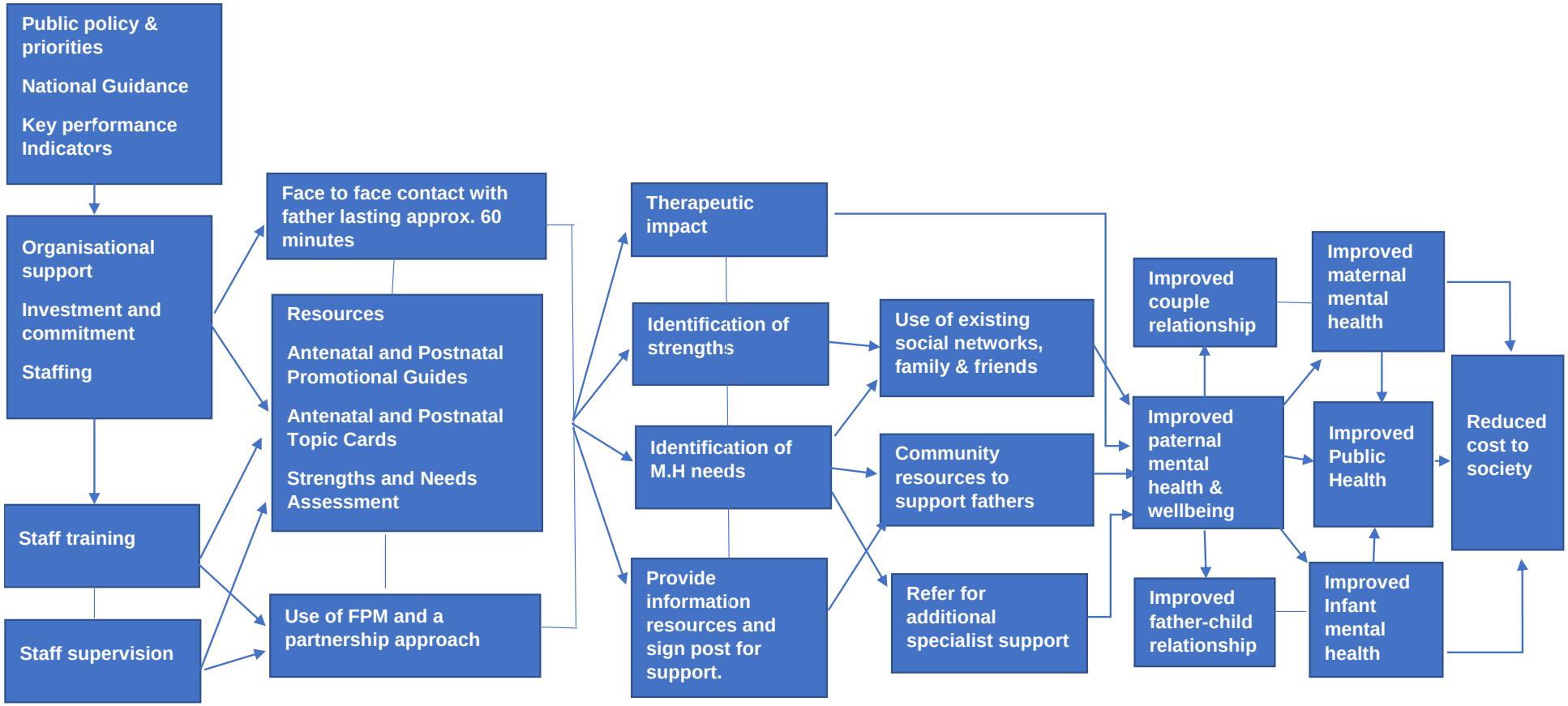


Figure 9: Logic model for improving first-time fathers' mental health and wellbeing using the Promotional Guide System

6.6 Chapter Summary

In this chapter, an overview of the intervention was presented, reflecting all aspects of the (TIDieR) checklist for describing an intervention (Hoffmann et al., 2014). Findings from study *phases I and II* (discussed in chapters 4 and 5) were mapped against the Promotional Guide system and a new theory of change developed to describe the sequence of events that need to take place to achieve the desired outcome. The logic model proposed in this chapter provides a diagrammatic 'road map' to help with the evaluation process and feasibility study in *phase III* of this thesis, discussed in the next chapter.

CHAPTER 7: STUDY 3 - FEASIBILITY STUDY AND PROCESS EVALUATION

7.1 Introduction

In this chapter *Phase III* of this study is presented, namely a feasibility of the Promotional Guides system with a nested process evaluation. The theory of change and logic model described in the previous chapter outlined how the Promotional Guide system had the potential to improve first-time fathers' mental health and wellbeing during their transition to fatherhood, which in turn, could contribute to other positive impacts for the whole family. The national Healthy Child Programme (HCP) (DH, 2009) recommends use of Promotional Guides with women antenatally and postnatally, which are reported to be effective when used by health visitors in identifying mothers' needs (Davis et al., 2005). No studies to date have considered this intervention in relation to fathers' needs.

Study *phase III* investigated whether it was feasible to use the Promotional Guide system to support first-time fathers' mental health and wellbeing, and the health professionals' views of delivering the intervention to fathers. Data are presented which explored the level of engagement, acceptability, fidelity of delivery and reported impact on first-time fathers' mental health and wellbeing. Barriers and facilitators to enable first-time fathers to access help or support for their mental health and well-being as well as the delivery of the intervention are also discussed.

7.2 Research Questions/ Aims

The aim of this study phase was to assess the feasibility of conducting a future definitive trial of the clinical effectiveness and cost of use of the Promotional Guide system with first-time fathers. It considered the feasibility and acceptability of the intervention, and piloted potential outcome measures for use in a future definitive

trial (Campbell et al., 2000). Important parameters such as first-time fathers' willingness to participate and whether health visitors could recruit first-time fathers to implement the Promotional Guides were explored. A nested process evaluation enabled the acceptability, feasibility and fidelity of programme delivery from the fathers' and health visitor's perspectives to be assessed. Reported impacts on first-time fathers' mental health and wellbeing were also considered, although this study was not powered to detect any statistically significant differences.

The study aims were:

1) To assess recruitment of first-time fathers, time to complete recruitment, and retention rates;
2) To consider outcome measures relating to fathers' general health, mental health, couple relationship and social support which could be used in a future definitive study;
3) To examine any potential changes following the use of the Promotional Guide system on first-time fathers' mental health and wellbeing, as assessed at 2-3 months after birth compared with baseline (antenatal);
4) To explore whether first-time fathers would engage with the Promotional Guide system at planned antenatal and postnatal contact points and if they found it acceptable to be asked about their mental health and wellbeing;
5) To obtain feedback from fathers about their experiences of the intervention and the research process;
6) To explore health visitors' use of Promotional Guides (including any barriers), intervention fidelity and any 'active ingredients' which encouraged use;
7) To obtain feedback from health visitors to establish the suitability of the use of Promotional Guides with first-time fathers, and possible improvements to both the intervention and the research process alongside any unintended intervention outcomes;
8) To use outcome data to calculate sample size for a future trial.

7.3 Method

A prospective observational cohort study was conducted incorporating quantitative and qualitative data collection methods. Feasibility was assessed using recruitment and retention rates, data completeness; and acceptability as assessed using study questionnaires, qualitative interviews and observations of Promotional Guide consultations.

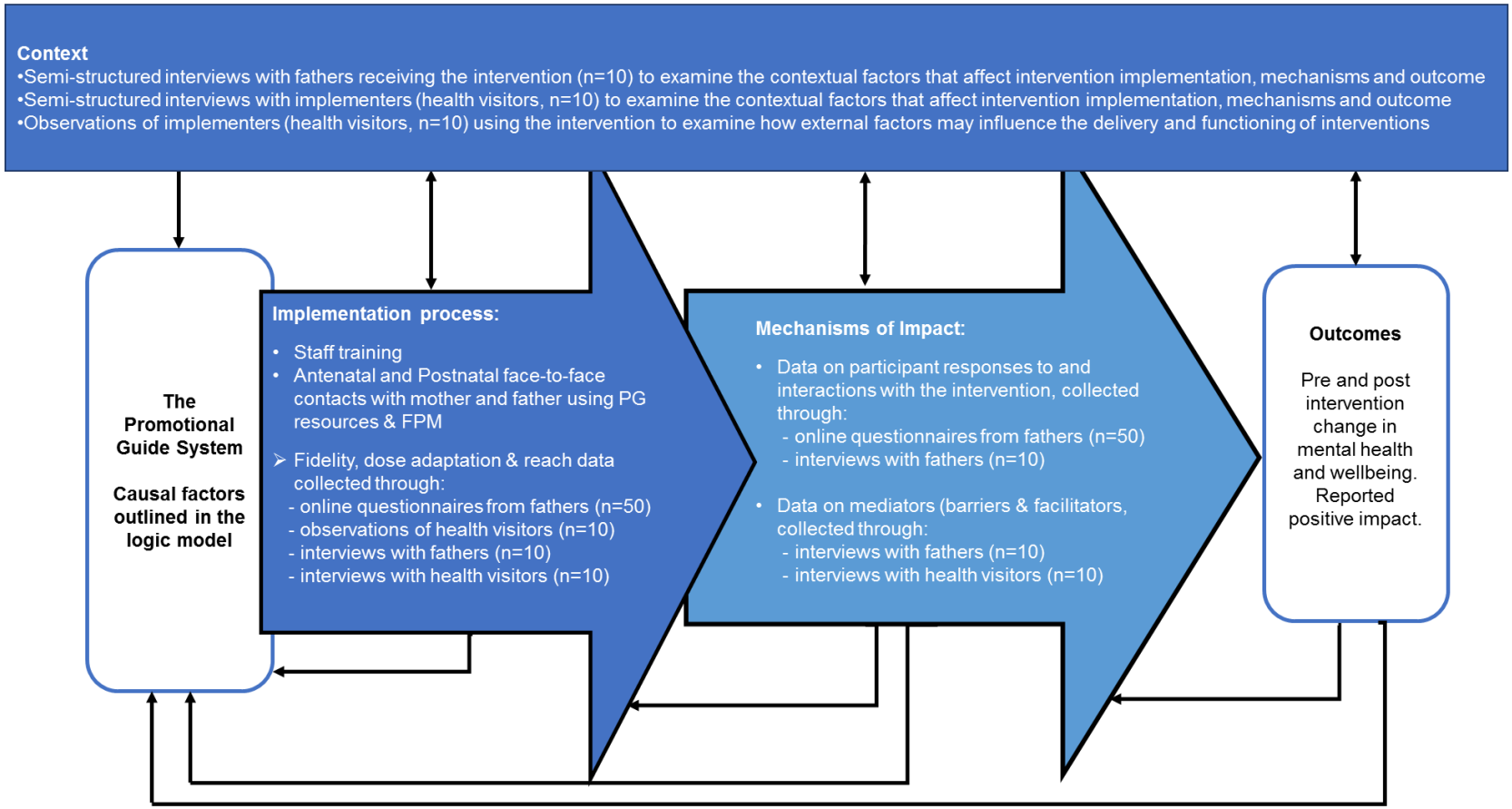
While randomised controlled trials (RCTs) are considered the 'gold standard' and the most robust method for assessing effectiveness of an intervention due to the minimisation of potential confounding factors (Evans, 2003), a feasibility trial was not considered to be appropriate for this particular study.

Firstly, the Promotional Guide system is an intervention delivered by health visitors universally to all parents in the two study sites and it would not be ethical to randomise new fathers to a control group, even in the unlikely event that the intervention had already been offered to them. Secondly, as this study aimed to assess the feasibility and acceptability of the Promotional Guide system among a specific population (first-time fathers) this could be achieved using a cohort study design rather than a trial (Chaudron et al., 2004). Thirdly, in terms of a practical consideration, a feasibility RCT requires considerable time and resources to set up and complete, which was not practical as part of a doctoral programme. As such, the intent was to use data collected to consider if a future definitive trial specifically targeting first-time fathers could be undertaken.

Currently as little is known about the use of the Promotional Guide system with first-time fathers, equipoise is present within the health visiting service. A process evaluation was included to better understand the causal assumptions underpinning the intervention and ascertain how it could work in practice, crucial components to building an evidence base that informs policy and practice (Craig et al., 2008). A

process evaluation, informed by Medical Research Council guidance (Moore et al., 2015) was chosen to provide a logical approach to evaluating the intervention, as outlined in Figure: 10.

Figure 10: Process evaluation plan following Medical Research Council guidance (Moore et al., 2015)



To evaluate the Promotional Guide system, it was important that it was implemented correctly and adhered to the programme as described in Chapter 6. The process evaluation enabled the exploration of the implementation process through collation of quantitative and qualitative data to provide an understanding of intervention functioning. Questions were developed to inform each stage of the evaluation process to ensure appropriate, in-depth data capture, to meet study aims (Table 12).

Table 12: Questions relating to the process evaluation of the Promotional Guide system, based on guidance from Moore et al. (2015).

Process Evaluation Steps	Possible questions	Context
1. Fidelity	- To what extent was the intervention implemented consistently with the underlying theory and philosophy?	- Was it consistent with the principles of the Family Partnership Model – did the health visitors use partnership, strength based, parent-led approaches?
2. Dose delivered	- Were all intervention components delivered?	- Were both the antenatal and postnatal Promotional Guides delivered?
	- To what extent were all of the intended components of the intervention provided to the participants?	- Were all five core themes of the Promotional Guides covered in the discussions?
	- To what extent were all materials designed for use in the intervention used?	- Did health visitors use the Promotional Guide topic cards to generate discussion?
	- To what extent was all of the intended content covered?	- Was there sufficient time to cover the required content?

	- To what extent were all of the intended methods, strategies, and/or activities used? - Was the intervention materials and advice well received by the providers?	- Did health visitors allow parents to choose the topic guides for discussion? Did they use the family strengths/ needs framework? - What are health visitors' views of the Promotional Guides? Do they find it useful and acceptable?
3. Dose received	- To what extent were fathers present at intervention activities? - To what extent were fathers engaged in the activities? - How did participants perceive the intervention? - To what extent did participants engage in follow-up? - To what extent did participants engage in recommended follow-up behaviour? - Was the intervention materials and advice well received by the participants?	- Were all fathers present at this intervention, in line with the universal family offer in the UK? - Where fathers were present with their partners, how engaged or involved did they feel? - Was it inclusive of fathers? Did they feel it addressed their needs? - Did fathers participate in both the antenatal and postnatal Promotional Guide contact? - Did fathers act on/ make any changes following the discussions taken place/ advice given during the Promotional Guide visits? - Did fathers find the Promotional Guides to be useful and acceptable?

4. Reach	- What proportion of the priority target fathers attended each session? How many participated in at least one session?	- This is a universal offer and therefore the target should be 100% attendance
5. Recruitment	- What procedures were used to invite/ attract fathers to participate in the intervention? - What were the barriers to involving fathers in the Promotional Guide contacts? - What planned and actual procedures were used to encourage continued involvement of fathers in the antenatal and postnatal Promotional Guide contact? - What were the barriers to maintaining father involvement?	- Were fathers exclusively invited to take part in the Promotional Guide contacts – antenatally and postnatally? - Were fathers informed by the health visitors that the Promotional Guides were aimed at fathers as well as mothers? - Are health visitors guided by organisational policies to involve fathers in the Promotional Guide contacts? - Did health visitors face any barriers to maintaining engagement with fathers from the antenatal Promotional Guide contact through to the postnatal Promotional Guide contact?
6. Context	- What other barriers and facilitators influenced delivery of the Promotional Guide System to fathers?	- What factors in the organization, community, social/political context, or other situational issues could potentially affect either intervention implementation or the intervention outcome?

Quantitative and qualitative data were collected from fathers through pre and post intervention questionnaires (online), and qualitative data through semi-structured telephone interviews. Information from health visitors was collected through a combination of face-to-face interviews, telephone interviews and observations.

7.3.1 Recruitment

Fathers

Expectant first-time fathers were recruited from antenatal clinics and health visitor contacts using leaflets, posters (Appendix – 23) and a website designed specifically for the study (www.newdadstudy.com).

Research posters were displayed in antenatal clinics and ultrasound scanning departments of the two NHS trusts which served four London boroughs. Research midwives were asked to discuss the study with potential participants, and with the father's permission, the names of those who were interested were forwarded to the researcher. Details of the study website and how to participate were also included in study posters and leaflets.

Once fathers who were interested in participating had contacted the researcher or where the researcher was forwarded details of potential participants by the research midwives, study procedures were explained in detail. This was done face-to-face where possible or over the phone. Expectant fathers who wished to take part were offered the participation information sheet (Appendix – 6), with details on how to complete study questionnaires sent via email. Separate, written consent was not necessary as completing the questionnaires implied consent to take part.

In the questionnaire the participants were asked to tick a box to indicate whether they would be willing to take part in a one-off interview with the researcher and provide their contact details. A subgroup of fathers who were willing were then invited to take part in individual qualitative interviews.

Health Visitors

Health visitors were recruited from the participating NHS sites for the qualitative interviews and observations. The researcher liaised with the managers of the health visiting teams within both NHS trusts and asked them to disseminate information about the study amongst their teams. Health visitors were informed about the study through staff meetings and emails; and invited (Appendix - 24) to participate in either an in-depth interview with the researcher about their Promotional Guide visits or to participate in an observation by the researcher of a Promotional Guide contact. Participation was on a voluntary basis and those interested in participating were offered the participant information sheet (Appendix – 7) and asked to sign a consent form (Appendix - 10).

7.3.2 Inclusion and Exclusion Criteria

Inclusion Criteria:

Fathers

- Expectant first-time fathers
- Biological or non-biological fathers
- Those living within the health catchment area of the two study sites

Health Visitors (Phase – 3 only)

- Qualified health visitors
- Trained to use Promotional Guides
- With experience of using Promotional Guides in practice

Exclusion Criteria:

Fathers

- Non-English speaking fathers were excluded for a number of reasons:
  - There are over 300 different languages spoken across the four London boroughs included in this study and it was not practical to include all.
  - There were difficulties associated with using interpreters for qualitative interviews, as the essence of the interview may get lost during translation.
  - Fathers who did not speak English may have had specific needs relating to isolation and non-integration.
  - Although the Promotional Guides have been translated into Spanish and Japanese, the intervention was offered universally across the country in English only. Spanish and Japanese were not commonly spoken languages at the two research sites.
  - It was not practical to have all relevant documentation relating to this research translated to other commonly spoken languages due to resource and time constraints.
- Fathers who experienced bereavement following neonatal death, stillbirth, pregnancy loss, sudden infant death.
- Fathers who were new parents with existing severe mental illnesses, such as schizophrenia and schizoaffective disorder, and severe forms of other disorders, such as personality disorders, major depression and bipolar disorder.

Health Visitors

Student health visitors or specialist health visitors not involved in carrying out routine antenatal and postnatal visits were excluded, as they would have limited experience of using the Promotional Guides in practice.

7.3.3 Sample Size

As this was a feasibility study, it was not powered to detect statistically significant differences in outcomes of interest. The findings would therefore be used to inform future sample size calculations.

Overall, the aim was to recruit up to 50 first-time fathers for the questionnaires, 25 from each site. Teare et al. (2014) recommend that an external pilot study which aims to estimate key parameters for the design of the definitive trial, should have at least 70 measured subjects (35 per group) when estimating the standard deviation for a continuous outcome. This suggested that 35 first-time fathers would be sufficient for this type of cohort study. However, to allow for drop-out and to enable more reliable estimates of change in the outcome measures, up to 50 expectant fathers were planned to be recruited across the two sites.

For the qualitative part of the study it was planned to invite up to 15-20 first-time fathers from the same cohort of 50 mentioned above. This number was considered sufficient because in most cases 15-20 interviews would enable data saturation to be reached, with no new information forthcoming (Green and Thorogood, 2014). For health visitors, data collection using a combination of interviews and observations was selected to enable a better understanding of the way in which the Promotional Guides were used in practice. Interviews would allow health visitors to provide in-depth personal accounts of their use of Promotional Guides, and the researcher to explore these in detail. In contrast, observations would allow the researcher to understand what happens in practice when Promotional Guides are used, to improve context to the accounts given by the health visitors. Using an observational method would also enable any discrepancies between what health visitors ‘say they do’ and what they ‘actually do’ in practice to be identified, providing a better understanding of implementation of this complex intervention (Bowling, 2002; Ritchie et al., 2014). Verbal consent was obtained from parents (mother and father, if present) for the researcher to be present during their consultation with the health visitor and written consent obtained from all fathers

and health visitors. The fathers in the observations were not part of the cohort recruited for the questionnaires or interviews.

7.3.4 Data Collection

Quantitative data

Fathers were recruited to complete the baseline questionnaire over a period of seven months, between June – December 2018. Those willing to participate were emailed a link to the web-based questionnaire which included questions on their socio-demographic details and study outcome measures, between 20-28 weeks of their partner's pregnancy (Appendix – 25). These questionnaires were completed prior to their partners' antenatal Promotional Guide contact with the health visitor (typically takes place between 28-32 weeks gestation). Following completion of the antenatal questionnaire, participants were sent an email by the researcher acknowledging their participation and informing them that a second questionnaire would need to be completed around 2-3 months following the birth of their baby, for which a reminder would be sent. Two months following the birth of their baby, the participants were sent another email with a second web link for the postnatal questionnaire (Appendix - 26), giving clear instructions for completion, along with the participation information sheet (Appendix - 6). The postnatal questionnaire contained the same outcome measures as the ones in the antenatal questionnaire. In addition, it had questions relating to Promotional Guides and qualitative questions pertaining to men's experience of health visiting services in the antenatal and postnatal period. As the postnatal Promotional Guide contact is typically delivered around 4-8 weeks after the birth of the baby, the postnatal questionnaire was completed after this period. If participants did not respond to the initial request, email and text reminders were sent at one-to-two-week intervals. A maximum of three reminders were sent and those who did not respond were recorded as dropping out from the study. None of the participants required a postal

questionnaire to be sent, as all had access to the online version. The postnatal questionnaires were completed between January and June 2019.

7.3.5 Outcome Measures

Three validated psychological health measures were included in both questionnaires along with validated measures of general health, couple relationship and perceived social support namely:

- Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS) (NHS Health Scotland, University of Warwick and University of Edinburgh, 2008)
- Edinburgh Postnatal Depression Scale (EPDS) (Cox et al, 1987; Wisner et al, 2002)
- General Anxiety Disorder 7-item Scale (GAD7) (Spitzer et al, 2006)
- EQ-5D (EuroQol Research Foundation, 2009)
- Couple Satisfaction Index (CSI) (Funk and Rogge, 2007)
- Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al, 1988)

Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS): Paternal mental well-being was assessed using the SWEMWBS. This scale includes seven positively worded items, with five response categories and is designed to measure feeling and functioning aspects of positive mental wellbeing. The 7-item Rasch compatible scale was shortened from the original Warwick Edinburgh Mental Wellbeing Scale (WEMWBS), which contains 14 items as the seven items were deemed to have superior scaling properties to the 14 items (Warwick Medical School, 2020). To compare results correctly with those of other studies, raw scores need to be transformed to metric scores using the standardised conversion table provided by the scale developers (Appendix - 27). Using categorical approaches,

scores can be divided into high, average and low mental wellbeing using cut-points. The cut off scores chosen for this study were based on those used in an evaluation to establish national norms for mental wellbeing based on the 2010–2013 Health Survey data for England (Ng Fat et al., 2017). A cut-point of 28 and above was considered as high mental wellbeing indicating positive mental health, 20-27 as average, and below 20 as low mental wellbeing, which was postulated to place approximately 15% of the participants into high and 15% into low categories (Ng Fat et al., 2017).

The scale includes a broad concept of positive mental well-being and incorporates both eudaimonic and hedonic perspectives on well-being (Tennant et al., 2007). The scale has been validated, with good psychometric properties, good validity and reliability with the ability to distinguish between population groups (New Economics Foundation, 2012). The scale has been widely used for population surveys in the UK, including in the Health Survey for England in 2016. It is particularly useful for measuring people's well-being at two different points in time and is recommended for measuring well-being before and after an intervention (New Economics Foundation, 2012). This scale was selected given its potential to be used as one of the primary outcome measures in a future trial.

To assess changes in mental wellbeing over time, a minimally important level of change (MILC) was proposed by the developers for SWEMWBS which covers the range from 1 to 3 points (Shah et al., 2018; Warwick Medical School, 2020). This reflects the smallest measured change in score that could be perceived as relevant or 'meaningful'; suggesting that something has really happened. MILC was used to calculate sample size for a future study, discussed further in the results section of this chapter. This study was registered with Warwick Medical School and permission obtained to use the scale for this research.

Edinburgh Postnatal Depression Scale (EPDS): Paternal depressive symptoms at each point of follow up were measured using the EPDS, a well-known tool used for screening for risk of maternal antenatal and postnatal depression. The scale includes ten questions and is validated for use with English speaking fathers (Matthey et al., 2001). It has been used in several other countries exploring fathers' mental health in the perinatal period (Ramchandani et al., 2005; Lai et al., 2010; Mao et al., 2011; Tran et al., 2012; Kamalifard et al., 2014). EPDS scores of over 10 are associated with minor depressive symptoms in fathers, with a sensitivity of 89.5% and specificity of 78.2% (Edmondson et al., 2010), and scores of 12 and over are associated with major depressive disorders, with a specificity rate of 94.9% and sensitivity of 100% (Massoudi, 2013). The authors of this scale were acknowledged in the online questionnaires and further permission to reproduce was not required.

Similar to the SWEMWBS, a Reliable Change Index (RCI) was proposed for the EPDS, which can evaluate whether a change over time of an individual score is considered statistically significant. The RCI for the EPDS is 4 points (Matthey, 2004), which means this is the difference needed between two scores for a clinician to be 95% confident that this change reflects a real change in the individual's mood, and is not likely to be due to measurement error. The EPDS would be another potential outcome measure in a future trial and therefore the RCI would need to be considered in sample size calculations.

General Anxiety Disorder 7-item Scale (GAD7): This is a self-reported questionnaire for screening and measuring severity of the four most common anxiety disorders (Generalised Anxiety Disorder (GAD), Panic Disorder, Social Phobia and Post Traumatic Stress Disorder). It has seven questions and is 70-90% sensitive and 80-90% specific across disorders / cut-offs. Initially validated in 2149 general population patients as a diagnostic tool for GAD (cut off score >10- sensitivity 89%, specificity 82%, test-retest reliability with ICC=0.83) (Spitzer et al.,

2006), the GAD7 was later also found to have reasonable sensitivity and specificity as a screener for panic disorder, social phobia and PTSD (cut off score 8 - sensitivity 77%, specificity 82%; cut off score 10 - sensitivity 68% and specificity 88% for any anxiety disorder) (Kroenke et al., 2007).

The RCI for GAD-7 is 4 points (National Collaborating Centre for Mental Health, 2018) and as this scale is likely to also be part of the primary outcome measures in a future trial, the RCI would need to be considered when calculating sample size.

The authors of this scale were acknowledged in the online questionnaires and further permission to reproduce was not required.

***EQ-5D*:** This is a commonly used standardised instrument for generic measure of health status internationally developed by the EuroQol Group. Each EQ-5D instrument comprises a short descriptive system questionnaire that covers five health dimensions: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression; and a visual analogue scale (EQ VAS). The version used in this study was EQ-5D-5L, the five-level version due to it being brief and easy to complete. The EQ-5D-5L has recently been validated in a diverse patient population in six countries, including eight patient groups with chronic conditions (cardiovascular disease, respiratory disease, depression, diabetes, liver disease, personality disorders, arthritis, stroke) and a student cohort (Janssen et al., 2013). This measure provided an overview of general health at baseline and any changes over the perinatal period. The study was registered at the EuroQol Research Foundation's website and permission was obtained to use this scale.

Couple relationship Index (CSI): This is a 32-item scale designed to measure one's satisfaction in a relationship. As paternal mental health is interlinked with wider aspects of fatherhood such as couple relational functioning, this scale enabled the assessment of fathers' satisfaction with their relationship during their

transition to fatherhood. The scale includes several items with different response scales and formats and can be used in a 16-item (CSI-16) format (Funk and Rogge, 2007), the version that was used in this study. This measure was selected because when compared with the two most widely used measures of relationship satisfaction, the Marital Adjustment Test (MAT) and the Dyadic Adjustment Scale (DAS), the CSI scales had higher precision of measurement and correspondingly greater power for detecting differences in levels of satisfaction (Funk and Rogge, 2007). The CSI scale is freely available for research and clinical use.

***Multidimensional Scale of Perceived Social Support (MSPSS*)**: Lack of adequate social support has been linked to depression in fathers during the perinatal period (Zelkowitz and Milet, 2001; Gao et al., 2009; Mao et al., 2011). The MSPSS is a self-report measure of subjectively assessed social support. This 12-item instrument uses a 7-point Likert scale and has 3 subscales: significant other, family, and friends. Scores range from 12 to 84, with higher scores indicating greater received social support. This scale was selected for this study as it has good internal reliability as a scale overall (Cronbach's coefficient alpha= 0.88), and for each subscale (Significant other = 0.91, Family = 0.87 and Friends = 0.85) (Zimet et al., 1988). The authors of this scale were acknowledged in the online questionnaires and further permission to reproduce was not required.

The five outcome measures discussed above, align well to the concepts identified in the theory of change and logic model developed for the Promotional Guide system (Figures: 8 and 9), and therefore selected to assess first-time fathers' mental health and wellbeing in this study.

Demographic data were also collected at baseline and included variables to measure family structure, ethnicity, working status, parental age and education level. This enabled comparisons to be made between the different groups of

fathers. Feasibility of the range of measures used and length of time needed to collect the measures was included in the process evaluation.

Qualitative data: first-time fathers

The questionnaires included open-ended questions relating to men's health and wellbeing, experience of fatherhood and perinatal mental health. Men were also asked to describe any additional support they would have found helpful during their transition to fatherhood.

A purposive sample of 17 fathers from the same cohort were invited to participate in in-depth qualitative interviews following completion of the second questionnaire and 10 responded. Initially it was planned to recruit 15-20 fathers, however after 10 interviews, no new information was forthcoming and data saturation was deemed to have been achieved. To gain a broad perspective of fathers' views about the Promotional Guides, and study participation, it was initially planned to invite fathers from different groups to participate in the interviews, as outlined in Table 13.

Table 13: Fathers to be invited for qualitative interviews

- Those not involved in the Promotional Guide Contacts: to ascertain reasons for non-involvement
- Those fully involved in the Promotional Guide Contacts (participated both antenatally and postnatally): to understand whether the Promotional Guides were helpful and whether they identified /addressed their mental health and wellbeing needs.
- Those partially involved in the Promotional Guide Contacts (participated only antenatally or only postnatally): to determine reasons for partial participation, barriers and fathers' perception of the Promotional Guides.

The interviews were conducted using an interview topic guide (Appendix – 28), to enable better understanding of the processes and underlying mechanisms in relation to context, setting, professionals and patients (Jansen et al., 2007; Byng et al., 2008). Face-to-face or telephone interviews were offered, however all fathers chose to participate in telephone interviews which allowed greater flexibility with regards to timings and participants did not have to take time off from work to participate. Most interviews were conducted during evenings and weekends. Participant information sheets were provided and written consent (Appendix – 6) obtained via email prior to each interview.

Health Visitors

A purposive sample of 11 health visitors across both NHS sites, who had experience of delivering the Promotional Guides to mothers and fathers, were interviewed to assess feasibility of delivering this intervention to fathers. The participants were offered the option of face-to-face or telephone interviews. Of the 11, six were telephone interviews and five face-to-face. An interview topic guide was developed based on the process evaluation questions in Table 12 (Appendix – 29) for interviews with health visitors. A fidelity checklist (Appendix – 30) was also used for all interviews to ascertain whether the intervention was implemented consistently with the underlying theory and philosophy of the Promotional Guide system.

In addition to this, seven health visitors were observed using the Promotional Guides in practice. The observations were informed by a checklist, also based on the process evaluation questions in Table 12 and the fidelity checklist (Appendix – 31). The researcher attended Promotional Guide visits with the participating health visitors for which parental consent was obtained (by the health visitor) prior to each visit. Following introductions and a brief explanation of the study, the researcher positioned herself out of the health visitor and parents' eyeline to maintain a non-

participant stance. As well as completing the observation checklist (Appendix – 31), detailed field notes were recorded by the researcher at each interview, which included descriptions of the setting, interactions and people present, as well as the researcher's own understanding and interpretation of what was happening. The researcher also ensured that she did not take an active part in any of the discussions between the health visitor and the parents.

The initial plan was to conduct five qualitative interviews and five observations at each site. This was achieved in one site, however at the other site six interviews and only two observations were carried due to the lack of Promotional Guide use during antenatal and postnatal contacts. This is considered further in the findings and discussion sections of this chapter.

7.3.6 Data Analysis

Quantitative data

Data collected informed the main feasibility study outcomes relating to recruitment uptake, intervention participation, and completion of follow-up. Mean and standard deviations were calculated for variables (potential primary outcomes in the main study) that were approximately normally distributed, and medians and inter-quartile ranges calculated for those not normally distributed. Continuous data were also described using Box plots (median, 25th and 75th percentiles, inner fences [1.5 times the interquartile range i.e. the height of the box] and outliers beyond the inner fences). Individual characteristics that were categorical (e.g. religion, ethnicity) were described using frequencies and percentages. Mean and standard deviation estimates for pre-post change in SWEMWBS, EPDS, and GAD7 were derived as these would be used to inform sample size calculations for a larger study.

The statistical analyses were performed using IBM SPSS version 25. Support with the analysis was provided by a statistician (Mr Trevor Murrells) based in the Faculty of Nursing, Midwifery and Palliative Care at King's College London.

Qualitative data

Qualitative data from interviews with fathers and health visitors were analysed using framework analysis and the five steps of data management for thematic analysis (Ritchie et al., 2014). Framework analysis was chosen over other qualitative approaches due to its ability to answer specific research questions (Ward et al., 2013), in this case questions relating to the use of Promotional Guides with fathers in practice. It allowed the categories and themes identified in the data from the questionnaires to be explicitly and systematically considered, while also facilitating enough flexibility to detect and characterise new themes that emerged from the interview data (Dixon-Woods, 2011). Each interview was transcribed using an external transcription company. Examples of transcripts from each group (first-time fathers and health visitors) are included in Appendices 32 and 33. As the data analysis process used was the same as described in Chapter 5 of this thesis, processes are not described in detail here. The initial codes developed with extract examples from the transcripts, and the frameworks constructed with themes and subthemes for both studies are included in Appendices 34, 35, 36 and 37. The computer software package NVivo (version 11) was used to facilitate this process.

The data collected from the observation of health visitors were incorporated into the initial thematic framework constructed from the health visitor interviews (Appendix – 37). This involved explicitly and systematically considering the observation data against the initial categories and themes identified from the interviews. Although this resulted in being a predominantly deductive process, the framework facilitated enough flexibility to detect and characterise any new themes emerging from the observational data. The focus of the observations was on the

content and delivery method of the Promotional Guide system, and the data obtained aligned well into the existing themes and subthemes of the initial framework with no new themes emerging. A summary of the observational data is presented in Appendix – 38.

Framework analysis enabled in-depth exploration of data while simultaneously maintaining an effective and transparent audit trail to enhance the rigour of the analytical processes and credibility of the findings (Ritchie et al., 2003). A framework to guide data analysis helped the researcher develop the skills to undertake robust qualitative data analysis, with support from the expert supervisory team.

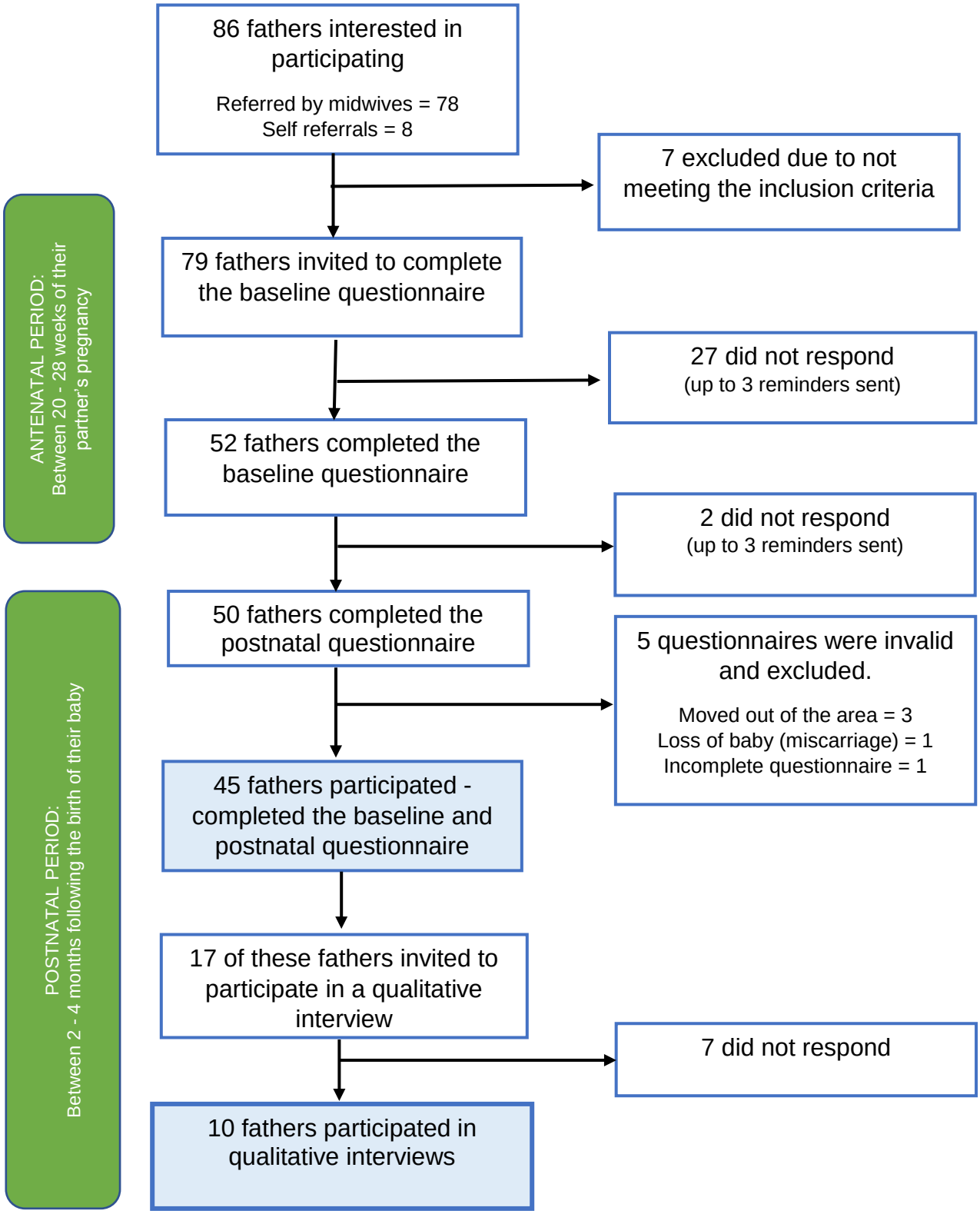
7.4 Results

7.4.1 Recruitment and Retention Rates

A total of 86 fathers were interested in participating, the majority of whom (n=78) were referred by research midwives at the study sites. Eight fathers contacted the researcher directly. Seven men did not meet inclusion criteria (not living in the study area n=3; had other children n=3; had a diagnosed mental illness n= 1), and were excluded. Of the 79 invited to complete the baseline questionnaire, 52 (66%) did so.

Of these 52 men, 50 also completed the postnatal questionnaire, a follow up and retention rate of 96%. Five of these questionnaires however were invalid (three participants had moved out of the area, one lost their baby due to a miscarriage, and one questionnaire was incomplete). Data presented in the following sections are based on the 45 men who completed baseline and postnatal questionnaires. A flow diagram of the recruitment process is presented in Figure: 11.

Figure 11: Flow diagram of the recruitment process



Participant Characteristics

The majority of participants (n= 32) were aged between 30 – 39 years (71%). Seven (16%) were aged between 25-29 years and six (13%) between 40 – 44 years.

Nineteen men (42%) described their ethnic background as White British (English n=13, Irish n=3, Scottish n=1, Welsh n=1, British n=1); eleven (24%) as White other (Romanian n=3, Slovakian n=2, Polish n=1, German n=1, Spanish n=1, Portuguese n=1, not specified n=2); seven (16%) as Indian; three (7%) as Asian (British Asian n=2, any other Asian n=1); three (7%) as Mixed (White and Black African n=1, Spanish and Lebanese n=1, not specified n=1); one (2%) as Black African; and one (2%) as 'other ethnic group' (not specified).

Fourteen of the men responded to a question on their religion that they were Christian, 5 Hindu, 1 Muslim, 1 Sikh, and 1 Jain. English was not the first language for 13 (29%) of these men. Most (91%, n=41) were either in full-time employment or were self-employed, with 4 (9%) reporting to be in part-time employment. Annual income of participants ranged from just over £5000 to over £61000, with 20 (44%) men earning under £46,000 per year and 21 (47%) earning over £46,000. Of these, only one man reported to earn under £15,000 per year. Four men (9%) did not reveal their income. Education levels ranged from GCSE to doctorate, with 53% being educated up to degree (or equivalent) level. All 45 men were in a couple relationship with their baby's mother and of these 30 (67%) were married. Only one father did not co-habit with his partner and baby at the time of the study. Full participant details are presented in Appendix - 39.

7.4.2 Feasibility of Collecting Outcome Measures and Impact

The measures included in the antenatal and postnatal questionnaires were discussed on pages 258-262. Although the mean and standard deviation was calculated for all the outcome measures, the median and inter-quartile ranges were also calculated for items which were not normally distributed (Table 14).

Table 14: Summary of outcome measures in antenatal and postnatal questionnaires

SCALES					Percentiles		
		Mean Score (SD)	Minimum Score	Maximum Score	25th	50th (Median)	75th
SWEMWBS raw	Antenatal	27.78 (3.29)	20	34	26	28	30
	Postnatal	27.07 (3.66)	17	35	26	27	29
SWEMWBS metric	Antenatal	25.08 (3.16)	18.59	32.55	22.78	25.03	27.03
	Postnatal	24.75 (4.09)	16.88	38.13	23.21	24.11	26.02
EPDS	Antenatal	4.73 (3.33)	0	13	2	5	7
	Postnatal	5.53 (4.50)	0	19	2	5	7
GAD7	Antenatal	2.47 (2.40)	0	9	0	2	4
	Postnatal	3.13 (3.24)	0	14	0	3	5
VAS	Antenatal	84.93 (9.71)	60	100	75.50	85.00	95.00
	Postnatal	80.73 (11.83)	52	100	71.00	80.00	90.00
CSI	Antenatal	71.47 (8.53)	49	81	69	73	79
	Postnatal	67.04 (15.34)	4	81	63	70	79
MDSPS Score	Antenatal	71.20 (8.84)	47	84	64.00	73.00	78.00
	Postnatal	70.07 (10.36)	43	84	65.50	71.00	78.50
MDSPS Mean	Antenatal	5.93 (0.74)	3.92	7.00	5.33	6.08	6.50
	Postnatal	5.84 (0.86)	3.58	7.00	5.46	5.92	6.54

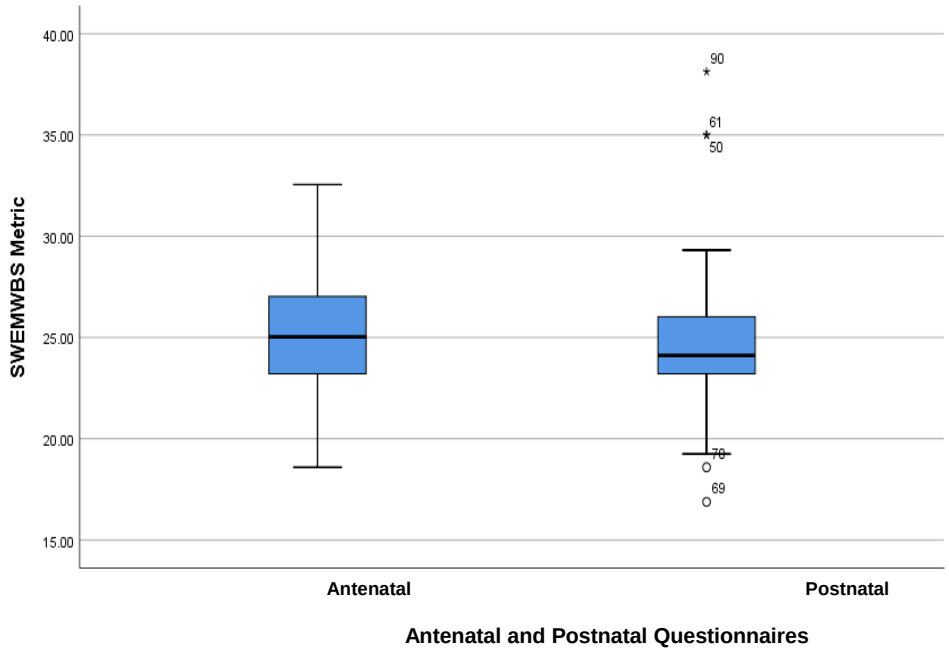
Significant other score	**Antenatal**	25.71 (2.35)	18	28	24	26	28
	Postnatal	25.11 (3.52)	10	28	24	25	28
Significant other mean	**Antenatal**	6.43 (0.59)	4.50	7.00	6.00	6.50	7.00
	Postnatal	6.28 (0.88)	2.50	7.00	6.00	6.25	7.00
Family score	**Antenatal**	23.00 (4.17)	11	28	21.00	24.00	26.50
	Postnatal	22.47 (4.69)	9	28	20.00	23.00	26.00
Family mean	**Antenatal**	5.75 (1.04)	2.75	7.00	5.25	6.00	6.63
	Postnatal	5.62 (1.17)	2.25	7.00	5.00	5.75	6.50
Friends score	**Antenatal**	22.49 (4.08)	10	28	20	23	25
	Postnatal	22.49 (3.73)	13	28	21	23	25
Friends mean	**Antenatal**	5.62 (1.02)	2.50	7.00	5.00	5.75	6.25
	Postnatal	5.62 (0.93)	3.25	7.00	5.25	5.75	6.25

Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS):

The raw scores from this scale were transformed to metric scores using the standardised conversion table provided by the scale developers (Appendix - 27).

The mean (SD) metric scores for first-time fathers' mental health and wellbeing at both time points [Antenatal = 25.08 (3.16), postnatal =24.75 (4.09)] suggested that participants had 'average' mental wellbeing. Findings were similar to the English populations norms for men using SWEMWBS, the mean (SD) being 23.7 (3.92) (Ng Fat et al., 2017). The minimum metric score reported in the antenatal period was 18.59, with only one man reporting low mental wellbeing (score <20). In the postnatal period the minimum metric score was 16.88, with seven men reporting low mental wellbeing (scores = 19.98, 19.98, 16.88, 18.59, 19.25, 19.25, 19.98). The maximum metric score antenatally was 32.55, with nine men reporting a high mental wellbeing (score ≥28); in the postnatal period the maximum metric score was 38.13, with seven men reporting a score ≥28 (Figure: 12).

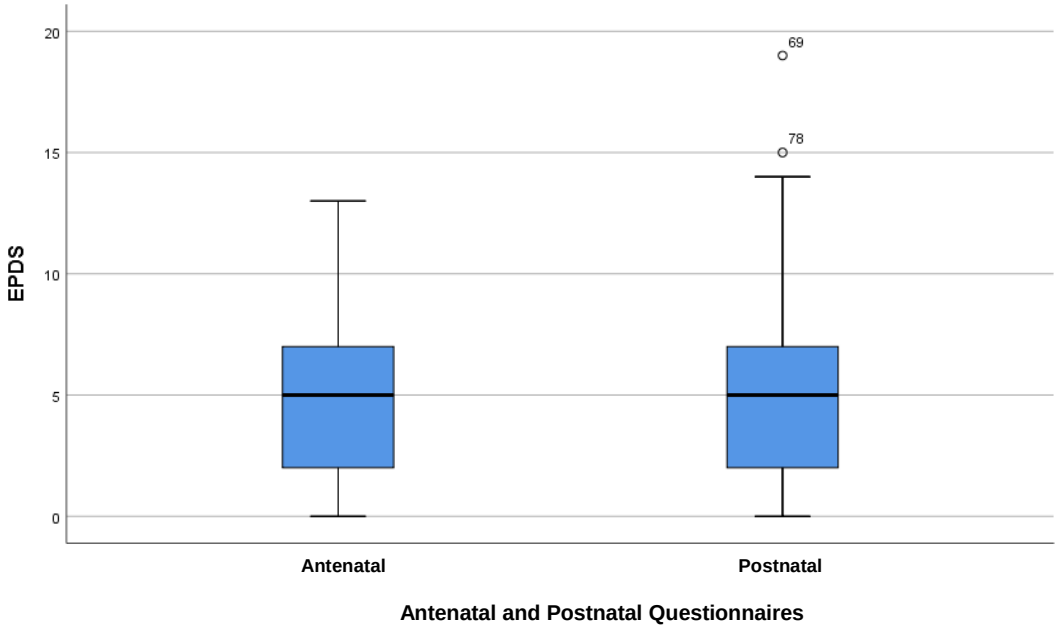
Figure 12: Box plot showing the first quartile, median, third quartile, inner fences and outliers for SWEMWBS as reported in the antenatal and postnatal questionnaires



EPDS

The mean (SD) score was 4.73 (3.33) in the antenatal period, increasing to 5.53 (4.50) in the postnatal period. The highest score in the antenatal period was 13 and 19 in the postnatal period, with the median for both time points being 5 (Figure: 13).

Figure 13: Box plot showing first quartile, median, third quartile, inner fences and outliers for EPDS as reported in the antenatal and postnatal questionnaires



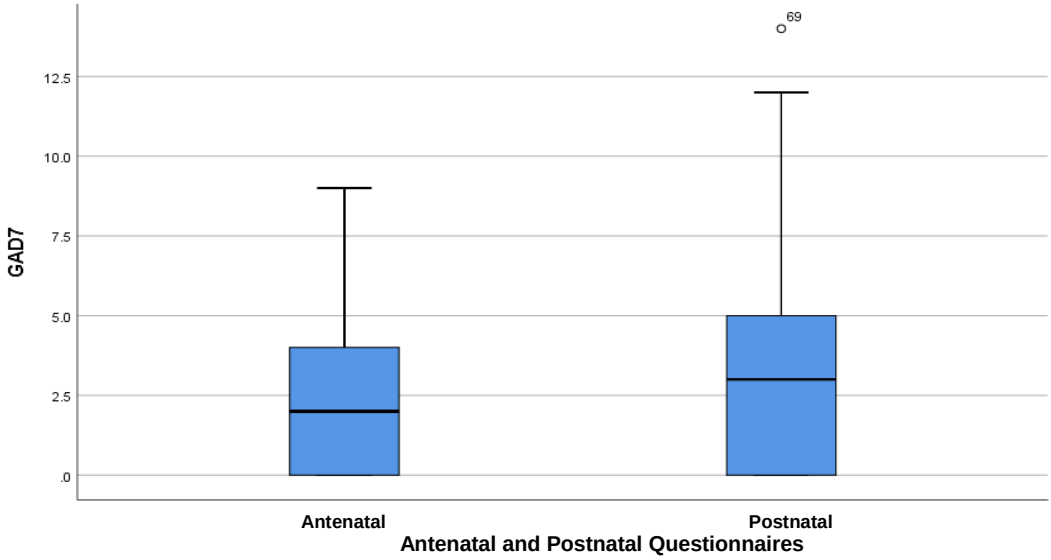
The cut-off point used to indicate possible depression was an EPDS score of ≥ 10, with 12 or more suggesting major depression (Edmondson et al., 2010; Massoudi et al., 2013; Carlberg et al., 2018). Of the 45 men, 18% (n=8) reported a score of ≥10 on the EPDS scale (see Appendix - 40) at least one point in time during the perinatal period, with 13% (n=6) reporting a score of 12 or more. Seven of these men had a higher EPDS score documented in the postnatal questionnaire,

suggesting depressive symptoms in the postnatal period potentially increased. Two men had an EPDS score of 13 in the antenatal period, with one increasing further in the postnatal period to 15, and the other reducing below the cut-off point (EPDS score= 7).

GAD7

The cut-off point used for general anxiety disorder was a score of 10, with 10-15 suggesting moderate anxiety and over 15 severe anxiety (Spitzer et al., 2006). The mean (SD) GAD-7 score was 2.47 (2.40) in the antenatal period, increasing to 3.13 (3.24) in the postnatal period. Overall there was a negative shift towards the postnatal period with the median score increasing from 2 to 3 (Figure: 14). The maximum score (9) in the antenatal period remained below the cut-off point but increased to 14 in the postnatal period. Two men (4%) reported a score of over 10 (individual scores of 14 and 12), suggesting moderate anxiety. Both (F24, F25) also scored high on the EPDS (19 and 14 respectively) and low on the SWEMWBS (16.88 and 18.59 respectively) in the postnatal period (see Appendix – 40).

Figure 14: Box plot showing first quartile, median, third quartile, inner fences and outliers for GAD-7 as reported in the antenatal and postnatal questionnaires



EQ-5D

The distribution of EQ-5L-5D dimension responses at baseline and postnatally are presented in Table 15. There were no changes in ‘self-care’ functions over the study period. However, one man (F41) who reported no problems with walking in the baseline questionnaire reported slight problems in the postnatal period (see Table 15). No further explanation for this change was provided by the participant and it is difficult to speculate reasons for this.

For usual activity there were six shifts in the negative direction. Forty-three (96%) men reported no problems with carrying on with their usual activity in the antenatal period and two (4%) reported slight problems, whereas postnatally 37 (82%) reported no problems, seven (16%) reported slight problems and one (2%) reported moderate problems with doing their usual activities.

With respect to pain and discomfort, there were three shifts in the negative direction. Three men who did not report any pain in the antenatal period reported slight pain in the postnatal period. There was also in shift in the positive direction, where one man reported slight pain in the antenatal period and no pain in the postnatal period, as shown in the box in Appendix - 41.

Table 15: Distribution of 5Q-5L-5D dimension responses at antenatal and postnatal period

Dimension	Antenatal n (%)	Postnatal N (%)
Mobility		
No Problem	44 (98%)	43 (96%)
Slight problems	1 (2%)	2 (4%)
Self Care		
No Problem	45 (100%)	45 (100%)
Usual Activity		
No Problem	43 (96%)	37 (82%)
Slight problems	2 (4%)	7 (16%)
Moderate problems	0	1 (2%)
Pain/ Discomfort		
No Problem	41 (91%)	39 (87%)
Slight problems	4 (9%)	6 (13%)
Anxiety/ Depression		
Not anxious/ depressed	37 (82%)	31 (69%)
Slightly anxious/ depressed	5 (11%)	13 (29%)
Moderately anxious/ depressed	3 (7%)	1 (2%)

For anxiety and depression, there were eight shifts in the negative direction. In the antenatal period 37 (82%) men reported not be anxious or depressed, five (11%) reported to be slightly anxious or depressed, and three (7%) reported to be moderately anxious or depressed. Whereas in the postnatal period 31 (69%)

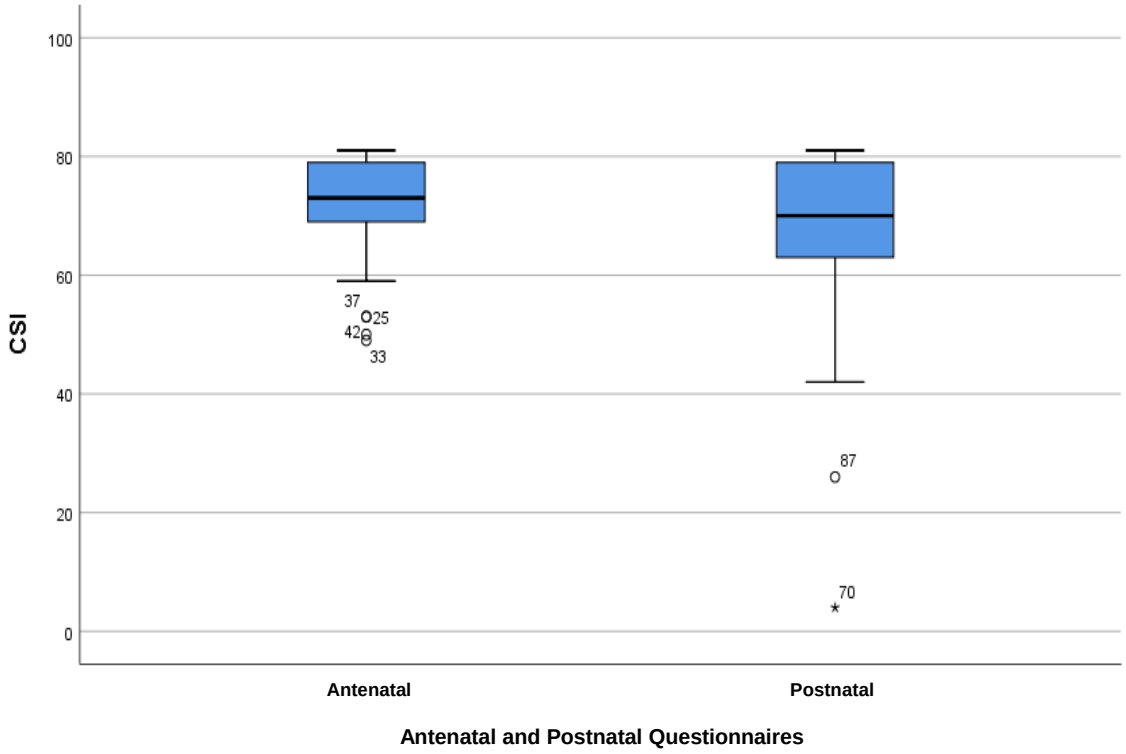
reported no anxiety or depression, 13 (29%) slight anxiety or depression, and only one (2%) moderate anxiety or depression. Overall there were eight shifts in the negative direction and five in the positive. Three of the men who reported anxiety and depression on this scale also scored high on the EPDS (F42) or on both the EPDS and GAD-7 (F24, F25).

The EQ-5D-5L scale also includes the EQ VAS, a visual analogue scale (ranging from 0-100) to record the respondent's self-rated health. The mean (SD) EQ VAS was reported as 84.93 (9.71) in antenatal period and 80.73 (11.83) in the postnatal period; and the median (IQR) as 75.50 (85-95) in the antenatal period and 71 (80-90) in the postnatal period, suggesting a slight decline over the two time points.

Couple Satisfaction Index

Scores on the Couple Satisfaction Index (CSI) can range from 0 to 81, with higher scores indicating higher levels of relationship satisfaction. CSI-16 scores falling below 51.5 suggest notable relationship dissatisfaction. The CSI mean (SD) was reported as 71.47 (8.53) in antenatal period and 67.04 (15.34) in the postnatal period, showing a decline following the birth of their baby (Figure: 15).

Figure 15: Box plot showing first quartile, median, third quartile, inner fences and outliers for CSI as reported in the antenatal and postnatal questionnaires



In Figure 15, it can be seen that there was one outlier, whose score on the CSI in the postnatal period was only four, a marked decline from their antenatal CSI score of 50. This participant also scored high on the EPDS and GAD-7 scales, reported anxiety and depression on the EQ5, reported low mental wellbeing on the SWEMWBS and his EQ VAS scores reduced from 85 to 70 in the postnatal period (F25).

Multidimensional Scale of Perceived Social Support (MSPSS):

This scale is divided into factor groups relating to source of social support, namely family, friends and significant other. The overall score ranges from 12 to 84, with

higher scores indicating higher levels of perceived social support. Mean scores of 1 to 2.9 suggest low support; 3 to 5 moderate support; and 5.1 to 7 high levels of perceived social support.

The overall MSPSS score in the antenatal period was 71.20, which decreased to 70.07 in the postnatal period. The mean (SD) overall score was 5.93 (0.74) in the antenatal period and 5.84 (0.86) in the postnatal period, suggesting high levels of social support at both time points. This finding was also consistent across the separate subscales, with the mean (SD) score for 'Significant Other' being 6.43 (0.59) antenatally and 6.28 (0.88) postnatally; for 'Family' 5.75 (1.04) and 5.62 (1.17); and for 'Friends' 5.62 (1.02) and 5.62 (0.93) respectively.

Although the lowest overall mean score for MSPSS was 3.92 antenatally and 3.58 postnatally suggesting moderate levels of support, the minimum mean scores for two of the subgroups showed lower levels of support postnatally compared to the antenatal period (the minimum mean score for 'significant other' dropped from 4.50 to 2.50; and for 'family from 2.75 to 2.25). The lowest mean score for 'friends' however increased from 2.50 in the antenatal period to 3.25 in the postnatal (see Table 16).

Table 16: Scores on Multidimensional Scale of Perceived Social Support (MSPSS) at antenatal and postnatal period, showing mean, standard deviation, first quartile, median, and third quartile ranges.

MSPSS	N	Mean (SD)	Minimum	Maximum	Percentiles		
					25th	50th (Median)	75th
Total Score AN	45	71.20 (8.84)	47	84	64.00	73.00	78.00
Total Mean AN	45	5.93 (0.74)	3.92	7.00	5.33	6.08	6.498
Total Score PN	45	70.07 (10.36)	43	84	65.50	71.00	78.50
Total Mean PN	45	5.84 (0.86)	3.58	7.00	5.46	5.92	6.54
Sig Other Score AN	45	25.71 (2.35)	18	28	24.00	26.00	28.00
Sig Other Mean AN	45	6.43 (0.59)	4.50	7.00	6.00	6.50	7.00
Sig Other Score PN	45	25.11 (3.52)	10	28	24.00	25.00	28.00
Sig Other Mean PN	45	6.28 (0.88)	2.50	7.00	6.00	6.25	7.00
Family Score AN	45	23.00 (4.17)	11	28	21.00	24.00	26.50
Family Mean AN	45	5.75 (1.04)	2.75	7.00	5.25	6.00	6.63
Family Score PN	45	22.47 (4.69)	9	28	20.00	23.00	26.00
Family Mean PN	45	5.62 (1.17)	2.25	7.00	5.00	5.75	6.50
Friends Score AN	45	22.49 (4.08)	10	28	20.00	23.00	25.00
Friends Mean AN	45	5.62 (1.02)	2.50	7.00	5.00	5.75	6.25
Friends Score PN	45	22.49 (3.73)	13	28	21.00	23.00	25.00
Friends Mean PN	45	5.62 (0.93)	3.25	7.00	5.25	5.75	6.25

While antenatal and postnatal outcomes were collected from 45 participants, none had received the intervention at both time points (full intervention). Seven (16%) participants reported receiving the intervention at one time point only (Antenatal Promotional Guide n=3, Postnatal Promotional Guide n=4). Of these seven, one father also participated in a follow-up qualitative interview (discussed in the next section) where it transpired that he had not received the intervention even though he had stated in the questionnaire that he had. Due to the very small number of fathers receiving the intervention (less than 14%), further analysis of differences between the two groups (intervention vs usual care) was not carried out.

7.4.3 Feedback from Fathers – Experience, Engagement, Mental Health and Research Process

Feedback was obtained using a range of open and closed questions. In addition, at the end of each questionnaire participants were asked to indicate whether they were happy to be contacted by the researcher to take part in a brief interview to talk about their experiences. Twenty-nine (64%) of the 45 men said 'yes' (See Table 17).

Table 17: Men interested in participating in a qualitative interview

Participant	Involvement with Promotional Guides (Intervention)	
	Antenatal	Postnatal
F1	N	N
F2	N	N
F3	N	N
F5	N	N
F6	N	N

F10	N	N
F11	N	N
F12	N	N
F13	N	N
F14	N	N
F15	N	N
F16	N	N
F17	N	**Y**
F18	N	N
F19	N	N
F22	N	N
F26	N	N
F27	N	N
F28	N	N
F29	N	N
F30	**Y**	N
F32	**Y**	N
F34	N	N
F35	N	N
F38	N	N
F40	N	N
F41	N	**Y**
F44	N	N
F45	N	N

Fathers invited to participate in telephone interviews but did not respond

Fathers who were invited and participated in qualitative interviews

As described earlier, the plan was to interview men from three categories: those not involved in the Promotional Guide contacts, those fully involved in the Promotional Guide contacts (i.e. participated both antenatally and postnatally), and those who only received one contact. However, as none were fully involved with the intervention, a combination of those not involved with the Promotional Guide contacts and those partially involved were invited to participate in the interviews. In total 17 men were invited via email, and 10 responded (Table 17). The demographic details of the men who participated in the interviews are included in Appendix- 39.

Data were analysed using framework analysis and six major categories identified:

1. Fathers' experience of health visitor contact
2. Fathers' experience of Promotional Guides
3. Fathers' experience of health services in the perinatal period
4. Fathers' experience of fatherhood
5. Fathers' mental health and wellbeing
6. Fathers' experience of the research process

The findings relating to these categories are discussed below.

Fathers' experiences of health visitor contact

Invitation to attend

Feedback from questionnaires

Men were asked if they were invited to attend a planned appointment with the health visitor when their partner was between 28-32 weeks pregnant. In total 13 (29%) men had attended this appointment, which included 11 who were invited and

two who were not. Similarly, men were also asked to identify whether they were invited to attend a planned appointment with the health visitor when their baby was around 6 – 8 weeks old. Over half reported being invited (n= 25, 56%), 17 of whom attended and eight did not (five due to work commitments, three did not specify). In addition, five men who were not invited also attended, making it 22 (49%) in total.

Feedback from interviews

None of the 10 fathers were explicitly invited to attend any of the appointments with the health visitor throughout the perinatal period. As one father stated *"… it was never an explicit appointment for me"* (F11). Some were present during home visits in the postnatal period, as one father explained *"they didn't specifically ask me to be at home when they came, so they didn't have to ask me specifically, I was present, so they didn't have to invite me or anything, I was just there in the same room with P [wife] and the baby*" (F19).

Another father said "*I mean she came to the house a couple of times and so obviously I was there, I wasn't told to leave the house…. it's not that I wasn't invited, it wasn't made sort of expressly clear, "Oh, you know, your partner needs to come along as well""* (F13).

Visits from the Health Visitor

Feedback from questionnaires

Those who attended the antenatal appointment found a number of aspects helpful, such as the "*opportunity to ask questions in case there were any*" (F3); "*information about the birth"* (F36); information on "*what vaccinations would be needed*", "*what to do if we* [they] *had a problem during pregnancy*" (F12); and the knowledge "*that there is help there if needed*" (F15). Men also commented on how this contact helped them prepare for their new role as fathers. One man stated, *"it made me*

think about certain changes in my life" (F30), while another said, "*it gives you a heads up of what is to come really"* (F39).

One man commented that the health visitor was "*not being honest that breastfeeding can potentially be very painful*" (F12) which was the least helpful aspect of their visit, while another mentioned the visit taking "*too long*" (F39).

Providing information and support relating to their new baby and reassuring parents were seen as positive aspects of the postnatal health visitor visit:

"*It was a chance to get reassurance on any query with the baby without having to go see the doctor*" (F1).

"*Information about looking after the baby - feeding and sleeping tips. It was reassuring to know that we were doing things right*" (F18).

"*Support with breast feeding. Guidance on where to seek help if this became necessary. Generous time given to us in the comfort of our home*" (F40).

Unhelpful aspects of this contact related to the visit being unplanned, "*their expected arrival time was too general"* (F1); the health visitor not asking about the father's wellbeing, "*if I wasn't well I wasn't really asked*" (F12); only one home visit being provided "*it happened just once*" (F17); and the health visitor's attitude towards mixed-feeding "*abrasive and close minded (breast feeding only) about new parenting techniques and not a particularly good listener"* (F11).

Feedback from interviews

None of the participants interviewed recalled receiving a visit from the health visitor in the antenatal period, as one father said "*I don't think we had any health visitors prior to her giving birth*" (F38), while another said "*nobody came to the house when she* [wife] *was pregnant*" (F35). One father spoke about an early morning postnatal

visit from a health visitor: "*at sort of 8:30 in the morning somebody else came and just kind of looked around the house…. I guess my wife got the impression that it was just to make sure … it felt like a safeguarding sort of visit*" (F45).

One father talked about seeing different health visitors in the postnatal period which meant there was no opportunity to build a relationship with any single practitioner: "*there were different ones that came and so there wasn't really a relationship as such*" (F13).

Involvement

Feedback from interviews

Men's experiences with the health visiting service varied. Some felt very involved during the consultations (postnatal) and described feeling "*very much part of the conversation*". He said "*I was being listened to, they were asking me specific questions as well. Not just about me but about how I was perceiving my wife's state of mind or physical exhaustion to be*" (F19). Another father felt the health visitor was "*trying to involve both parents, asking different types of questions, observing the behaviour, how we* [they] *talked to each other…. I think it was like a 50/50, based on* [the parents' needs]" (F28).

Other men described feeling "*not really that involved, …. when the health visitor came it was sort of talking to L* [partner] *but I was sort of sat on the sofa as well, and she didn't really sort of engage with me really*". This father however accepted not being spoken to because he explained his partner "*was the one who was pregnant and I* [he] *sort of felt as if I* [he] *was sort of the support person*" (F13). Similarly another father described himself as being treated like the "*bag holder*" for his wife, he said "*it's like I'm the bag holder which is fine, you know, I'm not complaining about that obviously, but kind of to ask how … you know, even some*

questions, so how do you feel being a new dad, sort of, you know, how is it going for you. That would have been enough to kind of make you feel a bit more involved in his life, or in the system basically" (F45).

Some fathers described health visitors simply focused on being task oriented where "*they came round, weighed, measured, checked over, asked if we had any questions and then kind of said goodbye*" (F32). "*It was never them saying to me, "Do you have anything to say, would you like to know anything?""* (F35).

Fathers' experience of Promotional Guides

Feedback from questionnaires

Three fathers had reported the Promotional Guide being used during the antenatal appointment and four during the postnatal. In the questionnaire men were asked to state what topics/ topic cards were discussed with the health visitor. One man stated that only one topic card was discussed, 'Our labour & our baby's birth' (F30), while another stated that ten of the eleven topic cards were discussed during the antenatal contact (F39). One father who had ticked all eleven topic cards as being discussed during the antenatal visit (F32) was later interviewed, where he clarified that the subject areas were covered by the health visitor, but he did not recall seeing any topic cards or the Promotional Guides being mentioned or used during that contact.

Four men reported the Promotional Guide topic cards being discussed in the postnatal visit. The topics were 'Our emotional wellbeing' (F17, F20), 'Becoming a mum, a dad & parents' (F17), 'Our baby's development' (F17); 'Caring for our baby' (F20), 'Our baby's cues' (F4, F17, F20).

Feedback from interviews

When asked at interview about the health visitor's use of the Promotional Guides, the men's responses were "*that doesn't ring a bell*" (F19); "*no, I can't remember that being the case*" (F13); "*I don't recall that happening*" (F10); "*no, absolutely not, no. So, the first time I heard of that was through your study which was quite recent actually*" (F38); "*no, there was nothing of that sort*" (F45). This was despite giving fathers an explanation of what the Promotional Guides were and what the topic cards may have contained.

Some fathers however did talk about leaflets and local information offered by health visitors, "*they did give us a big sort of bundles of pamphlets, if you like, breastfeeding, and looking after … you know, vaccinations and things … or immunisation and things like that*" (F1). Another said "*they always had a lot of material so they will give us pamphlets, print outs, like a list of local best support groups*" but this father went on to say "*I don't recall anything specifically addressed to the partners*" (F11).

Fathers' experience of health services in the perinatal period

Feedback from questionnaires

A combination of positive and negative comments were made by men about their experiences during the perinatal period. One father stated that he was "*very impressed from start to finish, the care at the hospital during labour was incredible, follow-up midwife appointments were good, the health visitor provided lots of info…*" (F2).

However, many fathers stated that they did not feel included or involved by health professionals. One father described the postnatal ward as feeling "*a little hostile to fathers at times*" (F6). Others stated how the services were mainly geared towards the mother (F15, F25, F28, F36, F45), and how the "*fathers/ partners are kind of left as bystanders – which is not optimal*" (F11). Another father described his experience as "*being a passenger rather than participant*" during the perinatal period (F24).

The support in the postnatal period was reported as being "*less thorough*" with "*no immediate continuous support with postnatal issues comparable to the prenatal service*" (F3). Another man felt least supported in the postnatal period because there were "*no detailed directions given as to what all facilities we have* [they had access to] *and what to do when in certain situations*" (F21).

The lack of adequate communication between health professionals was also highlighted (F1). In addition, fathers not being acknowledged by health professionals featured strongly in the feedback (F2, F26, F29, F34, F35, F36, F45).

Feedback from interviews

Some fathers had positive experiences with health professionals in the postnatal period, where one father said "*we were massively, massively impressed by the care and support we received from the NHS and especially the ….hospital staff, they were exceptionally helpful for my wife*" (F19). Fathers also talked about feeling grateful for the services they received, in particular appreciating the home visits by the midwives following the birth of their baby (F1). One father also acknowledged that "*you guys* [health professionals] *do as much as you can*" (F38).

Other fathers talked about the lack of support they received, particularly in the postnatal period. One father of a seven-month-old felt that the support after the first few months was non-existent both for himself and his partner "*I'd say in terms of…initial dad support, … there hasn't been anything but since then there hasn't been anything at all for me……so it's that lack of support just continues*..." (F13).

Fathers who did access support from antenatal classes had to use their own initiative, as this father stated "*I think there is not much ongoing for fathers, I would feel, unless you really want to get involved. And you seek the information, you seek advice*" (F28). The postnatal care in hospital was described by one father as being *"… a bit different, things felt like they were a bit disorganised, unorganised*" (F45). This father also felt responsible and unsupported when his partner and baby were separated for over an hour after birth, "*from my perspective my job in that time is to make sure all of that goes as smoothly as possible… it took quite a long time, like it was over an hour where, you know, while the mum and baby were separated. And I kind of felt responsible for that, so I was a bit annoyed, like on the day like he was born it was like well what could I have done. So, there was no sort of kind of support*" (F45).

Fathers' experience of fatherhood

Feedback from questionnaires

A number of fathers commented on feeling tired and sleep deprived, which often increased their stress levels and anxiety in the postnatal period (F2, F15, F18, F24, F34, F36, F42). One father explained how he was "*occasionally snappy, angry and impatient…*" (F26). Another stated that due to being sleep deprived, his mood could "*fluctuate quickly*" (F29).

Financial responsibility was also a concern. One father reported to be "*more concerned about long term finances since becoming father*" (F20), while another stated "*it's too stressful, I'm always tired, have to work hard for money, its expensive*" (F37).

Men commented on wanting to spend more time with their child (F45) and that two week's paternity leave was not long enough (F19, F32).

Some men were concerned about weight gain in the postnatal period and included comments such as: "*I feel a bit fat* (F45); "*I have spent almost zero time doing any exercise, I've gained weight*" (F1); and "*would like to be in better shape and go back to doing some exercise*" (F17).

Feedback from interviews

Fathers talked about finding it difficult to go back to work and be separated from their baby. According to one father "*for that first six months it's almost harder for the father because, you know, I have to go to work and so I see him for, you know, 30 minutes in the morning and then I get back and I see him for an hour in the evening, and you've got a son and where you've got to relate that to living to the weekends. And so I'd say in a way it's the type of support that is required is slightly different for that because it's almost sort of dealing with separation from your son and it's something which is quite difficult*" (F13).

A number of fathers mentioned breastfeeding difficulties and lack of relevant support as challenging. One father described his wife feeling 'judged' because she was not able to breastfeed "*she felt that she was being judged. There was something … an inadequacy with her rather than the other problems. So in the end we just went to a private lactation consultant to help us out because we tried multiple support groups, and everyone had such a different opinion. It was not*

scientific, it was more an anecdotal kind of set up" (F11). Similarly, another father talked about receiving inconsistent advice and support from health professionals until "*eventually then she* [his wife] *got somebody who was almost like a teacher of breastfeeding techniques, like a lot more experienced and skilled, to kind of help out*" (F1).

Increased anxiety was also mentioned in the postnatal period because "*if you are a father to a new born child and you have some kind of financial problems, the level of anxiety would definitely go up because you now have to worry about your children as well on top whatever your existing set up was"* (F11).

Fathers' mental health and wellbeing

Feedback from questionnaires

Out of the 45 men, only one (2%) was asked about their experiences or needs relating to becoming a father during the antenatal visit by the health visitor. Men's comments included "*it* [the antenatal contact] *was all about my partner and the baby*" (F36) and the father "*wasn't asked anything beyond how I* [he] *was doing*" (F19).

In the postnatal period, only two (4%) fathers stated that they were asked about their own experiences or needs relating to fatherhood. Comments from men included "*the visit is focussed on the mother and the baby, the father does not appear to be on the top of the list in terms of priority*" (F11); "*generally health visitors don't even acknowledge my presence even when there"* (F29).

Feedback from interviews

The majority of fathers were not asked about their own mental health and wellbeing by the health visitor during the perinatal period. The focus generally tended to be

on the women, as this father explained "*about my partner's wellbeing? Very much so. Not so much my own*" (F10). Another said, "*they never asked anything to the birthing partners or the father, so they never ask are you feeling exhausted, are you feeling over … and are you okay?*" (F11).

According to one father, "*there wasn't really any time when they said, "What are your own feelings"*?" (F35). However, most men accepted this as the norm, as one father explained "*I think the focus of the health visitors in my personal opinion is rightly focused on the mother and the baby's wellbeing and I don't think they give a conscious thought about the husband or the father or the partner, however they describe it*" (F11). Another father said "*no one's really asked me how I'm doing, should I say, rather than how the mum's doing and the baby's doing. But, again, it doesn't really bother me, because I'm just getting on with it*" (F38). One father felt that his role during the visit was more about "*the listening part ….rather than just asking her too many questions*" (F28).

Those who were asked questions about their own wellbeing were asked questions such as "*how I* [he] *was managing work and the baby and everything else*" (F19), or "*along the lines of, "How are you coping? Everything going okay? Are you getting much sleep?" so probably more in a soft way*" (F32) rather than being asked direct questions about mental health.

Health professionals spoke to fathers in a more '*light-hearted'* way. According to one dad "*it was mainly just kind of, you know, the odd jokes, you know, joke around as if it was my job to change the nappies, or, you know, look after … I have to look after my wife and the baby and sort of thing. So, I don't have any sort of recollection of staff or health professional's kind of taking my health into consideration*" (F45).

Barriers to accessing support

Feedback from interviews

Fathers talked about many barriers to accessing support for their mental health and wellbeing from health services. Fathers were usually not informed about any antenatal or postnatal appointments by midwives or health visitors. These were normally arranged directly with the mother as this father expressed "*before the baby was born, I wasn't really notified from my point of view, I think it was just my wife"* (F28). Another said "*I suppose they are booked with the mother, aren't they? … I think they seem to be, probably quite rightly, more geared towards when the mum is going to be in or when is the best time to come for the next appointment. Because, I suppose, usually, in that case, the dads are at work or back at work, generally, so I don't feel very involved*" (F32).

Another barrier mentioned by fathers was around the information resources on display and the "*lack of visibility or lack of communication and, you know, when you go to the appointments at the hospital, there's, you know, all of the literature and all of the stuff which is on the walls and is about more for the mother*" (F13).

Several men talked about health professionals' views about childbirth acting as a barrier to involving men. One father said, "*the main barrier in offering any kind of support to the fathers is the mindset that birth is all about the mother and the child, and everything else is a secondary consideration*" (F11). Another talked about fathers being perceived by health professionals as being "*like a support sort of figure*" to the mother rather than actually being there because it's their baby too and they "*want to be involved and actually care*" (F45). This father went on to say that he felt the barrier "*was from other people, like it was from staff*".

The use of medical language was also highlighted as leading to uncertainty and acting as a barrier to effective engagement (F10).

What would help fathers?

Access to support pre and post birth

Feedback from questionnaires

Men identified a number of things that they would have liked to receive from health services to support their transition to fatherhood, which included information about fathers' groups (F2, F13, F26, F44), childcare and support services (F17, F35, F37), "*feeding and general how-to-dos for caring for the baby*" (F19), tailored information for fathers (F34, F42), *"online videos and bitesize information*" (F40), and preparation for changes in new fatherhood (F2,F34). One father stated, "*Probably more that the health visitor shows interest in fatherhood and supports them too along with the mother*" (F35), while another wanted "*acknowledgment* [from health professionals] *that my life will also change*" (F45). Overall men wanted to be asked about their own wellbeing and supported in their new role as fathers as can be seen from the following statements:

"*it would have been nice to ask about how I was feeling*" (F36).

"*Probably more discussion or help on the life changes that come with being a new father and the adjustments that need to be made. …. as a dad you feel sometimes pushed to one side in terms of information available that is tailored to you*" (F34).

Men also wanted more 'realistic' information about breastfeeding and better support for their partners, as this father stated, "*everybody said breastfeeding was easy-there was no mention that it could be hard*" (F12).

Feedback from interviews

Fathers wanted "*the ability to meet other people who are in the same situation*" (F13), through antenatal classes or groups (such as NCT). Another father talked about how NCT "*would have been one thing which we* [they] *would have liked to have been part of*" (F19) but were not informed about it or about any other similar groups, by health professionals. Adequate antenatal preparation was considered important by most fathers.

Similar to the feedback in the questionnaires, fathers wanted to be asked about their own wellbeing: "*it's always nice to be asked how you're doing and how things are, so yeah. I guess generally she did ask how I am and stuff, but it wasn't direct towards like 'oh how is it being a father, and how's things'?"* (F38). Another said health professionals should ask "*some simple stuff. How are you feeling? You know, how are you doing? Do you have any concerns? But even maybe to build like a small little relationship every time with the father"* (F35). Some fathers suggested having a routine antenatal appointment for fathers with the midwife "*maybe like one for the dad at the start, like when the dad finds … because I remember when my wife told me that, you know, she's pregnant, I was … I'd obviously been … we'd wanted a baby, so I was very happy, but at that moment I was like shocked, like had this sort of sudden sense of panic. I'm like oh crap… this time next year I'm going to have like a brand new responsibility*" (F45). He suggested this contact would be good for discussing the practical issues relating to new fatherhood, as well as to "*have a professional to talk to, to kind of just say how are you doing and, you know, any support, and, you know, just similar to what my wife had, mental health questions and all that sort of stuff*" (F45).

Offering the father a separate appointment to the mother was seen as being appropriate "*because if it is a man or a woman, if they are going through some sort of abusive phase, facing abuse rather, it would be easier for them to speak up separately*" (F19).

Support for fathers in the postnatal period was also perceived as helpful. The "*support could be as simple as having a five-minute chat. Like this is normal, everyone goes through this, if you have any issues here are two or three numbers you can call, something of that kind would be helpful"* (F11). Fathers wanted to have access to a health professional who could inform them about support services and resources were available, as well as be at hand to answer any queries they may have in the postnatal period.

One father explained that "*if the health visitor would have a contact for both parents, whether it's text messages or email, and then make or schedule these kinds of appointments with both of us maybe I* [he] *would be more involved, you know, getting a little bit more information*" (F28). Another father suggested having a fathers' support group using social media platforms such as "*Whatsapp*", which could be moderated by a health professional (F10). The lack of any fathers' support group was highlighted by one father (F13). Father- only groups were mentioned to be preferable because it would be "*easier when men get in one room at a time, without their partner, and maybe they feel more open to talk*" (F35).

Men also wanted better facilities for fathers on postnatal wards so that they could better support their partners. As one father explained that there "*was just a bed over there and a very uncomfortable chair for me to be around with her and the baby, and given that I had not slept for more than 40, 45 hours, like it was quite physically exhausting to the extent that I literally slept on the floor"* (F11). Another

father explained how he had to sleep on a mat on the floor when he accompanied his partner on an antenatal ward (F1).

Fathers felt that they were not offered enough information about breastfeeding difficulties. In infant feeding classes "*it was almost presenting a utopian view of how feeding would come about, you know, you take the baby and you plonk him on it, and it just works like magic*" (F19). This was seen as a "*big gap*".

The fathers also wanted better information sharing between health and social services and to be provided with more information on any support available to them as fathers (other than the two weeks paternity leave), as highlighted by the fathers completing the questionnaires.

Fathers' experience of the research process

Motivation for participating

Feedback from interviews

Men's main motivation for taking part in this study were interest in the topic itself (F11, F45), being able to share their own views and experiences (F28), father's mental health being an under-researched area (F10), contribute to research on fathers (F1, F11, F13, F19, F38, F45), and help benefit other fathers (F38).

This father summed up the views of most men's motivation for participating: "*From my perspective, I feel like the fathers are sort of the forgotten entity when it comes to the pregnancy and the post pregnancy sort of thing. I wanted to be a part of contributing in any way that I could to make sure that this also an area of research or study that is taken up. Because more and more I see fathers being very, very involved in the child rearing, right from the very beginning and being supportive to their partners in their pregnancy…… I would say the gender roles are more fluid*

now, it's not like the man is completely hands off, so I want to make sure that I can participate and contribute in any way that I can because I see that this is an evolution of the role for me" (F19).

Some fathers felt that the gift voucher offered was an incentive too and that they could use it to buy something for their baby (F32), however that was not the primary motivation as this father explained: *"…and then she* [the health professional] *mentioned incentive, so I was just like, 'all right, fine, I was going to do it anyway', but I thought it was a brilliant idea"* (F35).

Experience of completing the questionnaires

All 10 fathers felt that the online questionnaires they were asked to complete were "*quite straight forward*" (F11), "*very simple to complete*" (F11, F28), "*well-nuanced*" (F10), and "*wasn't taxing at all……. it wasn't stressful, it wasn't strenuous*" (F45).

Interestingly, completing the questionnaires at two points in time made some men reflect on, and acknowledge, their own feelings at the time, as this father explained "*when I filled the first one, it let me think a lot about what I was going through, because a lot of it you don't … most of it you internalise, you don't really vocalise or you think about them explicitly. But when somebody poses a question to me, how's your stress level, how's your anxiety, are you feeling anxious? Then you think about it and then you realise, okay I am a little bit more anxious than I was before the pregnancy, before my partner became pregnant*" (F19), another said "*it did make me think about certain things, like the second question I did reminded me of like how .... I did feel a bit annoyed about like me not being asked* [about my own feelings] (F45).

One father commented on the way the questions were worded and felt it was a positive way to ascertain accurate feelings/views "*you were using good research techniques in the sense that instead of just asking one question, I think the questions were repeated in three or four different forms so that you had a better view of what exactly the person is trying to answer*" (F11).

One father considered that questions were too simplistic and did not consider the "*financial impact of having a baby, how are you going to manage time, those sorts of things", which could have been "explored in more depth in the questionnaire*" (F1).

Communication with researcher

All 10 fathers were very happy with the communication with the researcher and commented on the process being "*very straightforward*", "*really smooth*" and "*really easy to follow*" (F28).

Fathers commented on not feeling "*uncertain in any way and it's been quite positive really*" (F10), and that there was nothing that "*could have* [been] *done better*" (F1).

Being informed about the whole process from the outset was appreciated by the men as they were clear about what was expected of them and when they would receive the second questionnaire, as can be seen from the following quotes:

"… because you were quite clear on how it works from the get-go, weren't you? Because you told me you're going to fill this questionnaire out at the beginning, which I did, and then you did say I won't hear from you for a while, because until after she gives birth, that's when I'll fill out the second questionnaire…..So, in that sense it was brilliant, because from the get-go I knew exactly how this survey was going to work" (F38).

"…*you kept in good contact with me, we've had good contact, emails came through in advance. I knew about what's happening. ….. I think there's nothing I would change there. I don't want someone to call up and go, "Hey what did you think about this"? It ran quite smoothly which was good*" (F35).

One father also commented on how he enjoyed completing the questionnaire and looked forward to receiving the second one, especially as he felt his views were being considered as a new father (F45).

Benefits of participating in research

Men talked about several beneficial impacts of participating in the study, such being able to contribute to improving services for other fathers and involving fathers by asking their views:

"*when I joined, I don't think it was just for myself, I was thinking the bigger picture. Maybe at the end of your research, you could have information that would influence all the fathers*" (F38).

Completing the questionnaires allowed men to reflect on their own feelings about becoming a father, "*those questionnaires do make you think a lot actually about where you are as a person, and where you're going as a dad, and how you're feeling about things coming*" (F38). This was also highlighted by other fathers as discussed earlier (F19, F45).

Participating in this study also enabled men to access additional resources which they may not have had accessed otherwise: "*Like I only found out all this stuff for dads because of your study*" (F45).

7.4.4. Feedback from Health Visitors – Mental Health Enquiry, Promotional Guide Use, Intervention Fidelity, Perceived Benefits, Facilitators, Barriers, and Recommendations for Improvements

Eighteen health visitors participated in this study from the two NHS sites. Eleven participated in interviews either face-to-face or via telephone, and seven were observed using Promotional Guides in practice. Participants' ages ranged from 25 to over 60; length of qualification as a health visitor ranged from under two years to over 20 years; and the majority of health visitors worked full-time (n=13). Health visitors also came from various ethnic backgrounds. Most health visitors (n=15) had received their Promotional Guide training in the past three years, with only three reporting to have been trained three to four years prior to data collection for this study. All health visitors reported to receive some form of supervision, with the majority being in receipt of two to three different types from a range of supervision, to include preceptorship, restorative (an evidence-based model of reflective supervision used within health visiting), clinical, safeguarding, managerial, and peer supervision. See Table 18 for full participant characteristics.

Table 18: Characteristics of participant health visitors

	Age	Ethnicity	Employment	Length of qualification as HV	When received PG training	Supervision	Data collection method
HV1	50-54	White Other	Full-time	Over 20 years	1-2 years	Restorative	Face-to-face interview
HV2	45-49	Caribbean	Part-time	Less than 2 years	2-3 years	Managerial Safeguarding Restorative	Face-to-face interview
HV3	50-54	Irish	Part-time	15-20 years	1-2 years	Safeguarding Restorative	Face-to-face interview
HV4	45-49	Irish	Full-time	Less than 2 years	6 months - 1 year	Managerial Safeguarding	Face-to-face interview
HV5	Over 60	English	Part-time	12-20 years	2-3 years	Clinical Safeguarding Restorative	Face-to-face interview
HV6	35-39	Black British	Part-time	2-5 years	1-2 years	Managerial Safeguarding	Telephone interview
HV7	50-54	Black African	Full-time	15-20 years	3-4 years	Clinical Safeguarding Restorative	Telephone interview

HV8	40-44	White English	Full-time	2-5 years	2-3 years	Managerial Safeguarding	Telephone interview
HV9	25-29	Mixed – White & Black African	Full-time	2-5 years	1-2 years	Clinical Safeguarding	Telephone interview
HV10	45-49	Black British	Full-time	2-5 years	3-4 years	Clinical Peer	Telephone interview
HV11	45-49	Black African	Full-time	10-15 years	2-3 years	Clinical Safeguarding	Telephone interview
HV12	45-49	Caribbean	Full-time	5-10 years	2-3 years	Safeguarding	Observation (Home visit)
HV13	Over 60	White English	Part-time	Over 20 years	1-2 years	Clinical Managerial Safeguarding Peer	Observation (Clinic setting)
HV14	40-44	Korean	Full-time	Less than 2 years	2-3 years	Clinical Managerial Safeguarding	Observation (Clinic setting)
HV15	25-29	White English	Full-time	Less than 2 years	1-2 years	Managerial Safeguarding Peer	Observation (Clinic setting)
HV16	40-44	White Scottish	Full-time	2-5 years	6 months – 1 year	Clinical Safeguarding	Observation (Clinic setting)
HV17	50-54	African	Full-time	2-5 years	2-3 years	Clinical Safeguarding Peer	Observation (Home visit)
HV18	50-54	African	Full-time	15-20 years	3-4 years	Clinical Managerial	Observation (Home visit)

Five main themes were identified from the data collected from interviews and observations:

1. Enquiry into fathers' mental health
2. Promotional Guides in Practice
3. Health visitors' perception of the Promotional Guides System
4. Barriers to using promotional guides with fathers
5. Facilitators and recommendations for using promotional guides with fathers

Enquiry into fathers' mental health

Health visitors' practice around asking fathers about their mental health and wellbeing varied. One health visitor talked about inquiring about the father's wellbeing before the mother:

"*It's always about asking about them first thing you enter the house, asking about their wellbeing before the woman. Usually that always helps because nobody's asking them*" (HV10).

Some health visitors did not pay as much attention to fathers' mental health as they did with mothers. They would just inquire about fathers' general health rather than asking specific questions about their mental health.

"*Not as I would with the mother to be honest. I have generally asked, you know, general questions about how dad is feeling and dad's general health, but I haven't delved down as much as I would do with the mum*" (HV9).

"*I haven't really asked about mental health as such, but I ask how they - how do they feel about becoming parents, and do they understand how their life's going to change and how long have they been waiting for the baby?"* (HV2)

A few health visitors talked about their awareness of the mental health difficulties fathers may experience during the perinatal period and the evidence base for this. These health visitors said that they would discuss paternal mental health along with discussions about maternal mental health. One health visitor explained "*I try and then specifically say to dads you know that your mental health is as important as mum's…. And it's important that you look after yourself as well as looking after the mum*" (HV5). Another explained "*I think there's been so much more in the media about dads, new dads, the postnatal depression in dads, so I always go through all that as well*" (HV4).

Only one health visitor mentioned assessing paternal mental health using the Whooley questions if the father was present during the visit. The Whooley questions (Whooley et al., 1997) are recommended in the NICE guidance (NICE, 2018) and consist of two questions asking women about low mood and loss of interest or pleasure. If the father is not present then she would "*say to mum, "How is dad doing?" Because, you know, for instance, some of the dads that are working six time - six days a week, we don't get to see them, so it's important that - to ask the mum, "Well, how is dad?" Because, you know, he could be highly pressured, he could have lots of things going on for him that needs to be addressed*" (HV3).

During the **observations**, most health visitors made general enquiries about how the father was feeling and discussed some of the changes they may experience following the birth of their baby. In two observations, health visitors asked fathers direct questions about their mental health; and in another two, the health visitors did not discuss paternal mental health at all.

Promotional Guides in Practice

HV involvement with Promotional Guides

Health visitors' involvement with use of Promotional Guides varied between the two study sites. In one trust, the Promotional Guides were only used antenatally on a targeted basis. Although all staff had been trained to use Promotional Guides and there were management expectations that the Guides would be used universally at every antenatal contact, practice was to only use them for vulnerable families (those with identified additional needs such as safeguarding, mental health, domestic violence etc):

"*We're meant to. We're meant to have an antenatal, we've got an antenatal pack. But at the moment we're not doing antenatal contact except if it came to us from safeguarding*" (HV6).

"…*at the moment it's changed and we're only doing targeted families. So this is just families that, you know, there's concern*" (HV9).

"…. we are only doing antenatal contact for vulnerable clients" (HV8).

In the other trust, health visitors were expected to use the Promotional Guides antenatally and postnatally, however use varied between practitioners. Some used them routinely with all parents, some only antenatally, and some only when time allowed or when they felt it was necessary.

"*I've used them with mothers and less so with fathers because they're not always around, but mothers, definitely, and both antenatally and postnatally*" (HV3).

"*I haven't used that* [Promotional Guides] *in the postnatal period, as such, but I am, you know, looking at it. I cover quite a lot in the postnatal period and I see I cover quite a lot of it without using the guide itself*" (HV2).

"I *use them antenatally and postnatally with most of my families. Sometimes even if the dad's not there I try and use them. And sometimes if we're in a rush I may not get the chance. But otherwise I use them whenever I can*" (HV5).

Six of the seven observations of Promotional Guides used in practice were of antenatal contacts and only one was a postnatal contact.

One health visitor felt that it was easier to use the guide postnatally "*because with postnatal, you go to people's home and you have a control over your time …"* (HV1).

However, this view was not shared by all, with different expectations placed on the health visitors in the two trusts around the tools they should use to carry out the postnatal assessment. One health visitor explained the difficulties relating to this, *"….we have about three different tools that we use for assessing postnatal care and given an hour and a half in which to complete them. So, using the postnatal guidance* [Promotional Guide] *as well as the assessment tools from the trust has become quite a chore, you know, to try and complete that within the hour and a half"* (HV10).

How Promotional Guides were used by health visitors (Fidelity)

All 18 health visitors used the Promotional Guide topic cards to inform the content of their contacts. All health visitors described using the Promotional Guide topic cards as prompts to allow parents to take the lead and choose the topics that they wanted to discuss. If fathers were present during contacts, they were also included in the discussions:

"I would say to the woman, the pregnant woman, I'd say to her, you know, "Is there anything that you - out of this - these - this is just a guide for us, as to what we're going to discuss during the contact and, you know, is there anything that you

wanted us to go through?" And let her choose what she wants to talk about and then give him an opportunity as well" (HV2).

"When a card is presented, we usually space it out so that whatever they want to talk about they pick it up and talk about it. So they have the autonomy to choose what … they take the lead, it might be the man or the woman" (HV7).

"…if fathers are at the contact, I'll always make sure I include them in the conversation. I'd show them the guides, tell them that it's a prompt for them to raise any questions, if they've got any questions that they want to raise" (HV4).

During the observation, HV12 showed the topic cards to the mother and father and asked them to pick two each. The cards were then used as a basis for the discussions, which were mainly led by the parents.

Through the discussions of the topics chosen by the parents, health visitors identified or reported to identify specific main priorities with parents, and the resources (to include family members, friends and other social supports) needed to achieve their goals. However, none of the health visitors encouraged parents to keep a written record of their priorities, goals or improvements. The completion of the 'family strengths and needs summary' was variable, with reports/observations of 67% (n=12) not completing it at all, 22% (n=4) using it to inform their assessment without actually completing or recording it, and only 11% (n=2) fully completing it (manually completing and recording it). A fidelity questionnaire was used for both the interviews and observations, a summary of which is presented in Table 19.

Table 19: Fidelity checklist summary from interviews and observations with health visitors

Part No.	Use of PG Guide materials	Identified main priorities with parents	Encouraged parents to records priorities	Identification of resources for goal achievement	Completed Strengths & Needs summary	Used Family Map
HV1.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Completed fully	No
HV2.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV3.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Use to inform assessment but not completed	No
HV4.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV5.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV6.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV7.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Use to inform assessment but not completed	No
HV8.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No

HV9.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Complete fully	No
HV10.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Use to inform assessment but not completed	No
HV11.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Use to inform assessment but not completed	No
HV12.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV13.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV14.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV15.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV16.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV17.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No
HV18.	Use the PG topic cards as the basis of contact	Yes	No	Yes	Not completed	No

In this questionnaire an additional question was included about the 'Family Map', which was introduced by the Centre for Parent and Child Support (CPCS) in 2016, for use following a Promotional Guide contact. The Family Map enables parents to use a visual format to identify their goals and the resources needed to achieve them. It also supports them to make a written record of the plans made to meet their goals. None of the health visitors interviewed were aware of the Family Map and those observed did not use it during their Promotional Guide consultations.

Some health visitors found it difficult to find a balance between offering health promotion advice (as required by their organisation) and letting the parents lead the conversations, as HV8 explained: "*The problem is that you want to give this advice and give this information but if you are using the promotional guide, it's not an advice-giving session, it's led by the client. So I guess it's a bit of a compromise between letting them set the agenda, but also wanting to maximise the impact of the visit from a health promotion point of view. I also feel that the promotional guides that I'm balancing those two bits, and I have to kind of hold back a little bit on the amount of health promotion I would usually give*" (HV8).

Inviting fathers

There was variable practice with regards to inviting fathers to attend the Promotional Guide contacts. Health visitors reported no systems in place for inviting fathers, although invitation letters were usually addressed to both 'parents' or 'parent to be'.

"*Never. There's just no system in place to do that*" (HV1).

"*I've never known a contact where the father's been exclusively invited*" (HV4).

"*Well I think the letter goes out to parents, dear parents*" (HV5).

Some health visitors were more proactive in following up the invitation letter with a phone call to invite the fathers.

"*So the invite says, you know, the parents to be, so we ... on the invitation letter it doesn't specifically talk about the fathers. However I do follow up with a phone call with the mums, just to let them know that the dads are invited as well if they are available, and they are quite happy to bring them along*" (HV9).

"*Well if I can speak to the mum or leave a message I'll always say that both parents are invited and we'd like to see the dads as well*" (HV5).

In cases where fathers were not invited but present during the contact, they were included in the Promotional Guide discussions.

"*We don't invite, well personally, we don't invite or not invite. They're either there or they're not, and they're usually not…… If they're there, I mean, speaking for myself, I would invite them to stay or let them know that it's for both of them if they're there*" (HV8).

"…*they present themselves, they come with the mothers to antenatal. So, that's up to them, they weren't invited. So, if they present themselves, then I will always engage them in the process*" (HV1).

Steps taken to engage with women

All health visitors discussed the approach they used to introduce the Promotional Guides to the women. This was done through the Promotional Guide topic cards, allowing women to choose the topics that they wanted to discuss. This helped to engage women with the Promotional Guide conversations (Observation, HV12, HV18).

One health visitor discussed how this enabled parents to feel in control of the discussion: *"…after you've spoken to them about it and what the purpose is, they do you know ... and mainly because they feel they are in control of choosing what*

they would want to discuss in terms of the card. They feel, you know, in control of the meeting and they want to talk about things that are important to them" (HV9).

Using this approach to engage the woman was described by another health visitor as "*usually a really easy thing to do*" (HV5).

Health visitors spoke positively about the Promotional Guide topic cards and felt that the pictorial nature of the cards helped to engage women, and a useful tool for prioritising topics that needed to be discussed at visits.

"*So usually we explain to them what it is, and because it's pictorial they're actually more engaging with it and feel more included as opposed to the other tools that we use where we just sort of talk to them and tell them what should be done*" (HV1).

"*The women, they would come with their anxieties and once you bring out the Promotional Guide it gives them a chance to decide what's most important for them at that time and then, you can prioritise as well*" (HV2).

Steps taken to engage with fathers

Most health visitors did not take any additional or specific steps to engage with fathers. When the father was present, they ensured that they were included in the discussions and informed about the important role they played as a parent. One health visitor explained: "*I haven't had to do anything different from, you know, the times that I've used them. I find that the dads are as keen as the mums are. So I've not had to do anything different or say anything different to the dads that I've not said to the mums*" (HV9). Another health visitor said it's about *"… just making them feel that they're involved as well. That they're as much a part of the contacts, whether it's hospital appointments or health visiting appointments whatever, just making sure that they're aware that they're involved as much as the mum*" (HV4).

The sessions **observed** were very interactive. Questions were also directed at the father by the health visitor, which made him feel more involved. The health visitor discussed changes in early parenthood and coping strategies as one father was concerned about how he may cope with lack of sleep following birth (Observation, HV14).

Managing time between both parents

Health visitors talked about prioritising their time for the person who needed it more, which generally tended to be the mother: "*More time seems to go towards the mother, normally, because they've got more questions*" (HV4).

"*I think, obviously, mother asks more questions, because they're relevant to delivery and what's going to happen and dad probably doesn't*" (HV1).

"…. one particular visit I remember the dad, he was very - I mean, I was worried about him, about possibly whether he was slightly depressed, and I wanted some follow-up for him because I was quite concerned, and he - yeah, I would say at that particular visit, most of the time was spent answering dad's questions because he was very, very anxious. But I would say, at the moment, most of the visit would be concentrated towards mum. But, you know, there are some visits that I can think of that it probably was split equally" (HV3).

When fathers were less vocal than their partner, health visitors encouraged them to participate and ask questions to ensure that they felt involved. This was also seen in observations undertaken by the researcher.

Sometimes health visitors found it challenging when the mother and father had a lot to discuss, given the timeframe of the visit, and had to prioritise the most important topics for discussion.

Health visitors also used their professional judgement when prioritising the needs of the mother and father, and to decide whether it was appropriate to have certain discussions with both parents together, especially in cases where there may be the presence of domestic violence.

"*You have to mostly use your professional judgement. If there are sensitive issues like domestic violence, you really don't want to do it together*" (HV7).

Follow up and changes

Some health visitors talked about not having the opportunity to follow up families after the initial Promotional Guide contact. This is either due to the lack of continuity of care provided, where the follow up is not carried out by the same practitioner, or the provision of a targeted offer, where all families are not routinely followed up.

"…. it's hard to tell really, because you don't always see them at the new birth.…So, you'd see them in a clinic for the antenatal, but you won't be - always allocated them. It's only vulnerables that will be allocated" (HV4).

"*I have no opportunity to see them, once the discussion, because, you know, what's happening, the way the system is organised, I will see these people only once and perhaps there's no follow-up. I won't be necessarily the Health Visitor who will be visiting their child. So, it's the systemic failure, really, in the process*" (HV1).

Where health visitors have seen changes in fathers following the Promotional Guide contacts, they have mainly been in the context of the father's level of involvement with their child and partner.

"*I think mostly it's around their engagement with the child. So, we speak to them about dads' clubs, and …… about mental health*" (HV10).

"*Being supportive to the mum, definitely, without a doubt, more participation with baby care, even things down to changing nappies, and things like that, and as I say, often, they're very involved with the practical element*" (HV3).

One health visitor also talked about improvement seen in other health behaviours such as smoking. Following a discussion about passive smoking during the antenatal Promotional Guide contact, the father took positive steps to stopping.

Health visitors' perception of the Promotional Guide System

Are Promotional Guides inclusive of fathers?

All health visitors felt that the Promotional Guides were inclusive of fathers, due to the way in which the topic cards were designed for 'our baby and us' and included pictures of fathers as well as mothers and babies.

"…So it does highlight, you know, both parents and their involvement in supporting the child" (HV9).

"…*it is inclusive of the fathers because some of the pictures. Like the recent and the past experience, I like the fact that it's got a picture of the father in it. Because what I've seen in practice is if you look in most things that are actually there to support families it's normally pictures of just maybe a mother and baby, and maybe siblings*" (HV6).

What do fathers think of the Promotional Guides?

All health visitors felt that fathers found the Promotional Guide contact useful because it allowed them the freedom to choose what topics they wanted to discuss and provided an opportunity to discuss those in detail.

"*So, yeah, and they found that helpful….to just being given that choice to discuss what they want*" (HV10).

"*They have found it useful, beneficial and educating because it raises more awareness, so it goes beyond what they expected about antenatal, because it's quite detailed and there is no limit to how far they can discuss*" (HV7).

The topic cards acted as prompts to enable parents to talk about topics they may not have thought about otherwise: "*Some will point to a card and say they haven't really thought about it, so it is a prompter, it's a good prompt*" (HV4).

"*Because there maybe that there's topics on there that haven't - you know, that they may not think about. I mean, they might come up, but I suppose having them written down and seeing the visual, yeah, could be a trigger for them to discuss*" (HV3).

During the **observations** the Promotional Guide topic cards were handed to parents and they were asked to choose a few together for discussion. This seemed to encourage the father to raise queries and concerns he had, which were then discussed further (Observation, HV16).

Health visitors talked about feedback received from fathers following Promotional Guide visits where they felt enabled to have better discussions with their partner as a result. One health visitor said: "*I could see the dad's behaviour and the dad and mum were having this dialogue much better than if I were to ask mum about things and dad was sitting there like, you know, non-participant observer*" (HV1).

Another health visitor talked about fathers reporting that "*they're glad they came. Or enjoyed the conversation. Or that they learned something from it*" (HV5).

What are health visitors' views of the Promotional Guide system?

Overall the health visitors spoke positively about the Promotional Guide system. They valued its partnership approach, which enabled them to explore parents' feelings a lot better than being guided by their own or organisational priorities.

"…it's good in terms of the partnership working because having the promotional guide is really working in partnership with the family, especially the fathers, you know, they can see that you also involve them in the care; not you coming there, coming with your own agenda and saying this is what is expected of you" (HV11).

The Promotional Guides were described as a useful tool because it "*sparks that conversation and gets you into knowing a little bit more about the family than you would otherwise. It's not a tick box exercise so it makes you relate to the family"* (HV10).

Health visitors described the topic cards as "*user-friendly and when you lay them out, I like the colours of them. They're very nice bright colours, which I'm always a keen fan of*" (HV3).

One health visitor, who had recently qualified found the topic cards particularly helpful: "*Just as a prompt and as a prompt with the little key questions on the back of the cards, even for me as well. So, being newly qualified as well, it's just - it does help"* (HV4).

The Promotional Guides were considered to be a father-inclusive intervention, which enabled health visitors to engage more easily with fathers.

"*I think it's a really good resource. I think it's something that we should be doing all the time. I think that it's a really good way of engaging dads into the conversation that we haven't done before"* (HV5).

However, many struggled with the demands of the service and found it difficult to balance their time between facilitating the Promotional Guide conversation and delivering key health promotion messages as directed by their NHS trust. This health visitor sums up the difficulties: *"..we understand the values of the promotional guide in terms of exploring parents' feelings about the pregnancy, their hopes and fears for the baby, but we also have to come back to the office and tick boxes to say that we've discussed smoking and drinking, we've discussed breastfeeding, we've discussed accident prevention, we've discussed immunisations, and it is that balance which is tricky*" (HV8).

What are the benefits of involving fathers in the Promotional Guide contact?

All 11 health visitors interviewed talked about the benefits of involving the father in Promotional Guide contacts. Fathers being involved would "*give them a better awareness of what is going to happen, and just to give them an idea of the changes that are going to happen to both their lives. And even discussing things like feeding and how you can get them involved in skin-to-skin and even if there's breastfeeding, how they can be involved in the baby's life"* (HV4).

They also felt that having the father involved benefited the mother as fathers would be able to provide more support to their partners during the perinatal period and develop better bonding with their babies.

"*If the dads are involved I find the mums are quite calm and they're quite, you know happy that it's a joint effort and that dad is there to support all the way through. So I think it's positive*" (HV9).

"*I think potentially it makes the whole thing richer and it promotes bonding with the baby for both parents, but particularly for the dad, it reaffirms to them that this is a shared endeavour potentially*" (HV8).

Involving the fathers for these contacts was also perceived to enhance the health visiting assessment of the family situation, identifying any strengths and weaknesses they may have. "*I think it's a helpful thing, it's a positive thing in very … in a lot of many ways, albeit like I said if it is to tease out if there is any domestic violence, or if it is just to cement the different things that they may have held in tradition of what the man is supposed to be doing or not doing, what is expected of them from a professional. All of those things*" (HV10).

Having fathers involved was also discussed in relation to mental health and the important role fathers can play in supporting maternal and infant mental health.

"*I just think it's important for the dads to know about mum's mental health and how he can support her. But I think it's also important for the mum to know about how important it is to have a dad in that child's life….And for the dad to be active in the life and not just on the periphery. That it's good for the child's mental health and it's good all round for everybody*…" (HV5).

The Promotional Guide topic guides enabled the health visitor to discuss the importance of skin-to-skin contact with the dad and how he could get involved once the baby was born (Observation, HV16).

When health visitors used the Promotional Guides with both parents together, they occasionally faced challenges relating to couple relationship, however the benefits of using the Promotional Guides were reported to far outweigh the negative aspects.

"*Well the obvious ones are things, if the relationship isn't particularly good. Or if there's a domestic violence in the relationship. Or there are things that mum wants to talk about that she doesn't want to talk about in front of the dad. Or vice versa I suppose. And that's the only negatives I can see". Otherwise I think that the positives outweigh the negatives*" (HV5).

Barriers to using Promotional Guides with fathers

Capacity and duration of Promotional Guide contacts

One of the main challenges was the lack of capacity. Although they valued the Promotional Guides and found them to be a useful intervention, health visitors often did not have the capacity to use them routinely in practice.

"*I feel that as professionals we've been trained for it. You have the, you know, capability of using it. The only trouble is sometimes, you know, there's no capacity and it's a time management issue, and then the staff are not able to use it"* (HV9).

The lack of capacity also meant that many health visitors were not using the Promotional Guides with fathers.

"*it was suggested to us to include fathers, but again, like I said, I think it very much depends on individuals and their own values as well, as much as, you know, some people may put more effort than others to try and include the fathers, and some may, you know, if the father's not there he's not there, I don't have time, I've got to complete the visit by a certain date, so, you know, let me just do this visit*" (HV10).

In one NHS trust, health visitors allowed an hour and a half for the Promotional Guide contact, however some found that it often took longer to complete. This was especially the case when couples had a lot to discuss.

"*So even though we've planned that, you know, I'm going to be here for an hour and a half, by the time you bring the cards out, dad chooses what he wants to talk about, the things that he wants explore. The time just spills over, especially if they found it quite interesting and they just go, and I find sometimes it's a bit hard to control and keep it to the time if, you know, the parents are quite keen and interested in discussing*" (HV9).

Additionally, there was a view that the dad in the conversations would take up more time as *"… if you've got dad as well you don't know the extent to which dad wants to explore things*" (HV9).

In the other NHS trust only half an hour was allocated for the antenatal contacts, leaving the health visitors worried and reluctant to start up a conversation that they may not be able to finish.

"*I think the biggest one is always going to be time. You know we don't have very much allocated time. They can open up a huge can of worms sometimes because of the nature of the topics. And also because it's led by them*" (HV5).

"*But there's no time allocated to be able - because if the conversation takes you into one area and the mother wants to talk, the dad wants to talk, you can spend an hour. You're only given half an hour to see these parents, to do all other aspects of antenatal, to record, to welcome the parents, to - you know, and then to ascertain another one is coming*" (HV1).

Access to fathers

Gaining access to fathers was a main barrier. Fathers were often not present during visits: "*With fathers I find they're mostly not in contact. I'd say if I did ten new birth visits I'll probably have one occasion that a father was at home*" (HV6).

Another health visitor explained that the timing of these contacts being at 6-8 weeks postnatally meant "*they are hardly ever there at the six to eight weeks for follow-up check*" (HV6).

Many health visitors stated that fathers could not attend these appointments due to work commitments.

"*Well I think their work is a barrier. And I think certainly in some, we have quite a large Romanian population, and I think their employment is that if they don't work they don't get paid*" (HV5).

Of the seven observations carried out, although one father was invited by the health visitor, he was not present during the antenatal Promotional Guide visit due to work commitments.

Language and culture

Language and cultural differences were another barrier to using Promotional Guides with fathers, as well as mothers. Many health visitors described the difficulty of using the guides through an interpreter and were concerned that discussions were not as effective due to being misinterpreted or misunderstood.

"*And even if you use interpreters it's not going to mean the same when you're going through somebody else who interprets that. So that will be the barrier*" (HV11).

"*If the parents are not very fluent English speakers, they could misconstrue some of the terminologies and some of the questions, so you need to be careful, again*" (HV1).

Some were also concerned about not having access to an interpreter: "*if you don't have an Interpreter and there's very limited English, then you're not really going to get anything out of them*" (HV4).

Health visitors considered culture being a barrier to involving men with the Promotional Guide contact. In their view men from different cultures viewed this contact to be related to childbearing and childcare, and "*having babies is, like, women's work*" (HV2); "*a lot of Asian families … tend to honestly just leave it for*

*the woman to do baby care than having to kind of maybe talk about their feelings…"(*HV10).

Being a female worker was not seen as a barrier by health visitors to working effectively with fathers. What they considered more important than their sex was their approach to fathers and the way in which they interacted.

Facilitators and recommendations for using Promotional Guides with fathers

Systems and processes

Health visitors identified several facilitators for using the Promotional Guide system in practice more effectively and with fathers.

They felt that if parents were informed that the Promotional Guide contacts were aimed at both parents and if the invitations reflected this then it would encourage more fathers to attend the appointments, especially if they were given advanced notice of the appointment date.

"*I mean in an ideal world before we did an antenatal contact, we would send out a letter addressed to both parents saying 'we warmly invite you both to this home visit. The health visitor is coming to learn more about you both and your family' and put it like that. …and that letter would go out about a month and a half in advance so that dad can book some time off work if he needed to and that sort of thing"* (HV8).

Health visitors also felt that the venue in which the contact is undertaken is important. For example, the home setting was seen as ideal as it offered privacy and would allow parents to feel more relaxed (HV3).

When a contact was carried out in a clinic setting one health visitor talked about displaying the Promotional Guide topic cards on the desk so that "*if you've got the fathers sitting there and you've got a desk with the guides all spread out, they're drawn to it. Their eyes are drawn to it, so they can see it"* (HV4).

Being allowed to dedicate adequate time to use the Promotional Guides was seen as essential, as one health visitor explained: "*if you want to have a meaningful conversation that means that they're going to go away with something, then you can't really do it in less than half an hour"* (HV5).

Continuity of care was problematic within the health visiting services in both NHS trusts. Having the same practitioner facilitating the Promotional Guide contacts to parents was a factor that could better facilitate the process.

"*I think you need continuity and I think that's something that currently we don't have in this trust. I mean for me it would be great if I could do an antenatal, a postnatal, a new birth and a six week check with the same family. That way I'd know what we talked about. ….I would have built up a relationship and I would've known the conversations that we'd had. So by the time we got to the six week check. I think I'd feel I know them fairly well*" (HV5).

Of the one postnatal **observation** carried out, the health visitor undertaking the visit was not the same practitioner who carried out the antenatal contact for this family, therefore she had not had the chance to build any prior rapport with these parents (Observation, HV12).

Training and supervision

Health visitors were complementary about the initial Promotional Guide training they received and had champions in place:

"*Well, I think we had very good training of promotional guidance and the concept, conceptual, is fantastic*" (HV1).

"…we have in-house training as well, deliver in-house training, and we have championed those who are representing that, and then we support staff as the need arises" (HV7).

However, they raised concerns about the lack of routine use and refresher training or updates: "*And the less that you are using, you know, a certain skill that you've been trained to do, the more you are at risk of losing that skill……Because for a year now I don't think there's been any updates or any refresher training on the use of the promotional guides*" (HV9).

Having good opportunities for clinical supervision was seen as a facilitator to the implementation of Promotional Guides to both mothers and fathers, "*I think the clinical supervision is quite good, and the team ones are quite helpful as well"* (HV9).

A lack of support networks for fathers, was a challenge as health visitors did not know where to sign post fathers who requested for more support.

"*We don't have, you know, support networks for fathers, per se, and that again then is almost like okay, we start this conversation, they have questions, they need more help, where do they go, there is none*" (HV10).

Management and organisational support

There was a general view that more commitment and support was required from senior managers in order to implement the Promotional Guides in an effective manner.

"*I think we need to get the management on board to allow health visitors to be given more time to be able to develop this and really embed it in practice. Because having training, it's one thing, but putting things in reality is something else*" (HV1).

Health visitors considered that Promotional Guides were not a priority for the organisation: "*there is always shifting priorities anyway, and use of the promotional guide used to be a priority when they're investing in the training. I think it has now gone off the burner*" (HV8).

Although as one health visitor reported *"the expectation is that the contact will be undertaken. The organisation would like us to use to the promotional guide antenatally. The organisation would like us to be engaged better with fathers*" (HV8), there were no systems in place to enable this or monitor its use. The uptake of Promotional Guide contacts were not routinely collated by their organisations, and the systems also did not enable the recording of these contacts with fathers: "*it's not like it's accounted for in our own assessment tool…..we've got a separate assessment, our own assessment tools on our computer screens is actually about the mother and the baby*" (HV10).

To enable better facilitation of the Promotional Guide system with fathers "*it would be good if there was more systems in place like a number …I mean, we've no idea who's using it, who's not using it, and how many Practitioners use it. It might be useful to have a record of how often they're using it. I mean, we receive the training, but really, there hasn't been follow-ups since then and what*

discussion/supervision, in relation to scenarios that came up during their usage" (HV3).

7.4.5 Sample Size Calculation for a Future Study

One of the objectives of this study phase was to use the outcome data to calculate sample size for a future trial. The proposed theory of change discussed in Chapter 6 (Figure: 8), outlined the mechanisms through which the use of Promotional Guides could improve mental health and wellbeing of first-time fathers. Therefore, the sample size calculations were based on outcomes measuring mental health and wellbeing. As discussed earlier the minimally important level of change (MILC) for SWEMWBS was 1 to 3 points (Shah et al., 2018; Warwick Medical School, 2020) and the Reliable Change Index (RCI) for GAD-7 (National Collaborating Centre for Mental Health, 2018) and EPDS (Matthey, 2004) was 4 points, as proposed by the developers. By its nature if a RCI of 4 points was used in a sample size calculation, i.e. to test a very large effect, this would result in a small sample size estimate compared to that for a 1 to 3 point range. Therefore, the proposed sample for a future study was based on the MILC for SWEMWBS. The sample size was calculated using the POWER procedure in SAS with type I error (α) set to 0.05 (for a two-tailed test) with power (1-β) of 0.80 or 0.90. The effect size tested (MILC) was either 1 or 3.

For a power of 80% and type error of 5%, the sample size required for a MILC=1 would be 167 per trial arm. This sample size reduces to 20 per group for a MILC=3. The corresponding sample sizes per arm of the trial was 223 and 26 respectively for a test with a power of 90%. Taking a conservative view this would indicate a minimum overall sample size of 334 or 446 if more certainty is required.

7.5 Discussion

In this study phase, the feasibility of conducting a future definitive trial of effectiveness of use of the Promotional Guide system with first-time fathers was assessed in two different areas of London. The nested process evaluation considered the acceptability, feasibility and fidelity of programme delivery from the fathers and health visitor's perspectives. In this section the findings relating to the eight interlinking aims are discussed: recruitment and retention rates; feasibility of collecting outcome measures and impact; feedback from fathers; feedback from health visitors; and sample size needed for a future study.

7.5.1 Recruitment and Retention Rates

Fifty-two first-time fathers were initially recruited. Historically, fathers have been underrepresented in health research (Davison et al., 2017). In 2005, Phares et al., reported that 48% of studies on parenting and child psychopathology included only mothers as research participants, and 1% of studies included only fathers (Phares et al., 2005). More recently in a Cochrane Library systematic review of group-based parenting programmes for improving parental psychosocial health, Barlow et al. (2014) reported only four of the 48 included studies reported separate outcome data for fathers, which was considered a "serious omission" (Barlow et al., 2014, p-21). Recruitment of fathers in the current study however did not prove difficult, due to the recruitment strategy used.

All recruitment material was designed specifically for fathers with the input from the PPI advisory group (of first-time fathers) and other service user groups (such as the Fatherhood Institute). An American study of 303 fathers from diverse backgrounds, reported that when men were asked why fathers were less likely to participate in child health research compared to mothers, over 80% (N = 248) indicated it was due to fathers not being asked to participate (Davison et al., 2017), with those participating typically reported to be white, middle class, and married

(Coley, 2001). 'Not being asked to participate' was also a reason given by African American fathers for fathers not participating in health research (Hatchett et al., 2000). Factors such as lack of time, lack of accessibility to research, lack of interest in research (Mitchell et al., 2007) are also reasons for the underrepresentation of fathers in research. Davison et al., (2017) concluded that "*fathers' participation in research may increase if researchers explicitly invite father to participate, target father-focused recruitment venues, clearly communicate the benefits of the research for fathers and their families and adopt streamlined study procedures*" (p-267). Additionally, using email, phone, or internet has been reported to increase response rates compared to using traditional mail methodology (Baruch and Holtom, 2008).

The response rate for the current study was 66%, with a follow up and retention rate of 96%, higher than the average reported for studies that utilise data collected from individuals through surveys (Baruch and Holtom, 2008). This study also included fathers from diverse backgrounds, with less than half (42%) describing their ethnic background as White British, and 29% as English not their first language but this could reflect the study location. Different approaches to recruitment (midwives, study website, social media and posters in Children's Centres, health centres and GP practices), along with providing clearly articulated reasons for conducting the research may have contributed to the successful recruitment.

Most fathers (71%) were aged between 30 to 39 years, with over a third (35.5%) aged 30 to 34 years. The national average age for all fathers In England and Wales was 33.4 years in 2017, a small increase from 33.3 years in 2016 (ONS, 2017). While more recent figures are not yet available, the trend shows that the average age for fathers has increased steadily since 1968 and potentially even higher in 2019 (when this study was undertaken). These figures however include

'all fathers' and not just first-time fathers. The average age of first-time fathers in London, is also higher than the national average for England and Wales (ONS, 2017).

7.5.2 Feasibility of Collecting Outcome Measures and Impact

A number of outcome measures were used relating to general health, mental health, couple relationship and social support. All men completed the outcome measures in both questionnaires, showing that it is feasible to use these measures in a future definitive study. None of the fathers however received the Promotional Guide intervention in its entirety with some uncertainty that the fathers who did report receiving the intervention at one point in time (partially), actually did so. This suggests that questionnaires alone cannot be used to ascertain intervention content, and qualitative interviews should be incorporated to provide a better understanding of health visitor contacts when planning a future evaluation. Given the time period between the antenatal contact and the interviews with fathers of between four to six months, there is a possibility that the father who reported (in the questionnaire) to receive the intervention during the antenatal contact did not accurately recall this. It is also possible that the health visitor did not explain the intervention used, which may have resulted in the father not being aware of it. These factors need to be considered in the design of any future study, and perhaps an additional interview after the antenatal contact could be incorporated.

While there were gaps in the delivery of the intervention and it was not possible to make comparisons of the outcomes for the intervention and the usual care group, some changes were noted in fathers' responses between the antenatal and postnatal period. This however is not surprising as it reflects changes over time during a major life changing event in fathers (Paulson and Bazemore, 2010; Bradley and Slade, 2011). The general health questionnaire (EQ-5D) suggested an overall deterioration in self-reported health of fathers in the postnatal period

compared to the antenatal. Only a small proportion of fathers (n=2) had reported slight difficulty in carrying on with their usual activity prior to the birth of their baby, which increased to eight reporting slight or moderate problems eight to ten week after the birth. A small number of fathers also reported slight pain in the postnatal period. The number of men reporting low mental wellbeing was higher in the postnatal period compared to the antenatal. Similar patterns were also noted when looking at depression and anxiety scores using the EPDS, GAD-7 and EQ-5D. Major depression (EPDS score >12) was reported by 13% of men during the perinatal period. These figures are higher than those reported by Paulson and Bazemore (2010) and Cameron et al. (2016) in their meta-analyses. While the majority of studies included in the meta-analyses used self-reported questionnaires, some assessed depression following structured or semi-structured interviews, and some used both methods. The assessment tools, timing of assessment and cut-off point also varied between the different studies, therefore direct comparison was not possible. The figures from this study are comparable to those of Dudley et al.'s (2001) Australian study of 92 fathers, 12% of whom scored >12 of the EPDS when assessed between one to six months postnatally.

The EPDS scores were higher in the postnatal period compared to the antenatal period, similar to the anxiety scores reported (using GAD-7 and EQ-5D). The two men who reported moderate anxiety on GAD-7, also reported moderate anxiety and depression on EQ-5D, reported low mental wellbeing and major depressive symptoms in the postnatal period. These findings suggest a possible correlation between low mental wellbeing, depression and anxiety, although numbers are very small, and caution is needed. Nevertheless, using different assessment scales may be beneficial in obtaining a more comprehensive picture of first-time fathers' mental health and wellbeing.

As explored in *Phase I and II* of this study, becoming a father can have a negative impact on men's mental health and wellbeing (Baldwin et al., 2018; Baldwin et al., 2019). The systematic review discussed in Chapter 4, found three main factors that affected first-time fathers' mental health and wellbeing including 'the formation of the fatherhood identity', 'competing challenges of the new fatherhood role' and 'negative feelings and fears relating to it' (Baldwin et al., 2018). Many fathers acknowledged the restrictions of their new role and not being able to do all the things that they wanted to do, which often led to frustration (Dallos and Nokes, 2011). They also experienced tiredness, sleeplessness, exhaustion and irritation (Henwood and Procter, 2003; De Montigny and Lacharite, 2004; Rowe et al., 2013; Darwin et al., 2017) which increased their stress levels in the postnatal period. In the qualitative study discussed in Chapter 5 fathers reported increased tiredness and exhaustion following the birth of their child, and struggles relating to balancing conflicting demands, such as spending time with their child and having to go to work, which confirmed previously reported findings (Henwood and Procter, 2003; De Montigny and Lacharité, 2004; Genesoni and Tallandini, 2009; Machin, 2015; Oldfield and Carr, 2017). These factors could explain the deterioration in general health, low levels of mental wellbeing, and the increased rate of depression and anxiety reported in the postnatal period by men in this phase of the study.

The CSI results suggested a decline in the couple relationship in the postnatal period compared to the antenatal. As decline in couple relationship can result from depression or even stimulate depression in parents (Gottman et al., 2010), it is perhaps not surprising to see this finding, although again caution needs to be applied with respect to the current study. These findings are similar to that of the systematic review findings where a deterioration in couples' relationships following the birth was reported (Baldwin et al., 2018). For one father there was a marked decline in their CSI score, which decreased to four in the postnatal period, from 50 in the antenatal period. This participant's scores on the other scales used also

suggested low mental wellbeing, and high levels of anxiety and depression in the postnatal period.

Overall, on average men reported moderate levels of social support throughout the perinatal period in the current study. Some men however, perceived the support they received from their 'significant other' was lower in the postnatal period, compared to the antenatal period. This again could be due to deterioration in couple relationship following the birth, as discussed above. At the same time, some men perceived the support they received from their 'friends' increased in the postnatal period. This could be due to additional support received from other new fathers through NCT groups or new fathers' groups following the birth of their baby.

7.5.3 Feedback from Fathers

Experience of Promotional Guide Contact

None of the fathers interviewed had any recollection of the Promotional Guides or topic cards being used. Some commented on other information provided by health visitors on local services, health promotion advice and leaflets. It is possible that health visitors trained in the Promotional Guide system may have used the principles of the Family Partnership Model during their consultation without using the Promotional Guide material, however this cannot be ascertained from the information obtained from these interviews.

In the questionnaires, three fathers had reported the Promotional Guide being used during the antenatal appointment and four during the postnatal. As discussed earlier, although seven men had reported receiving the intervention at one point in time, this did not happen with at least one father, which was revealed during a later interview. Therefore, while six fathers reported the use of various Promotional Guide topic cards in their questionnaire responses, it is not possible to draw any

conclusion about how the intervention was delivered and whether the Promotional Guides were actually used as a basis for the contact in the first place. This is a huge omission in the implementation of the intervention, which was intended to be offered Universally to all families at both study sites.

Once it was established that the intervention had not been used, the interviews with first-time fathers focussed on their experiences of fatherhood, engagement with health services, the research process and whether they found it acceptable to be asked about their mental health and wellbeing by health visitors. Useful information was gained from these qualitative interviews, most of which confirmed the findings of our previous two studies; the qualitative systematic review of 22 studies (Baldwin et al., 2018) and the qualitative study of 21 first-time fathers (Baldwin et al., 2019).

Experience of health visitor contact and other professionals in the perinatal period

None of the ten fathers interviewed were exclusively invited to attend the antenatal or postnatal appointment with the health visitor, and only a small proportion of those completing the questionnaires were invited to the antenatal appointment and just over half invited to the postnatal. It has been previously documented that fathers are more likely to attend appointments if they are explicitly invited (Suffolk County Council, 2010; Baldwin, 2019). A recommendation from the systematic review (Chapter 4) suggested that it should be routine practice for fathers to be invited to be present with mothers at all appointments (Baldwin et al., 2018). Findings from this study also confirms that if fathers are explicitly invited, they are more likely to attend appointments with the health visitor.

Men who attended the antenatal appointment found a number of aspects helpful, which were all related to the preparation for fatherhood. They found it useful to know what to expect during labour and the early postnatal period, and who to contact if they needed help, similar to findings from our qualitative study (Baldwin et al., 2019). The postnatal visit was useful for reassuring parents and providing practical support relating to caring for their baby. Some fathers did not find the postnatal contact useful and the reasons were associated with the health visitor not being a 'good listener' or not enquiring about the father's own needs. This highlights the importance of health visitors having the right skills and attributes to work effectively with parents, especially fathers, which has also been highlighted previously by Robertson and colleagues (2015). In order to work successfully with fathers, health visitors need to be non-judgemental, male positive and empathic to men's needs (Robertson et al., 2015), and address fathers needs as men, and fathers (Ghate et al., 2000). Health visitors are also known as 'family workers', which means they need to include both parents in all their contacts and not just the 'mother' (Baldwin, 2019).

Some health visitors were very good at engaging with the father and made them feel part of the consultation along with the mother. Fathers felt involved when the health visitor asked about their wellbeing, considered their views/ opinions, listened to them and treated them as equal partners in the consultation. When this did not happen, fathers described feeling ignored by the health visitor or only being perceived as their partner's support person rather than a parent in their own right. One father described as being treated like his wife's "bag holder" by health professionals. Similarly, fathers had mixed views of other perinatal health professionals; positive experiences being linked to feeling included and negative experiences to feeling excluded by health professionals. The postnatal ward was described as being "a little hostile to fathers at times", and fathers treated as "bystanders" or "a passenger rather than participant" in the perinatal period. These views were not dissimilar to those reported in previous studies where men

described being perceived as ‘useless’ and feeling like ‘bit of a spare part’ (Dolan and Coe, 2011; Poh et al., 2014; Baldwin et al., 2019). The lack of adequate communication between health professionals, and fathers not being acknowledged by health professionals were common themes throughout, as also reported previously in both the published papers (Baldwin et al., 2018; 2019) in Chapter 4 and 5 of this thesis. While most fathers accepted that health professionals had to prioritise the mother’s needs, they highlighted the lack of support available for fathers. This was particularly evident in the postnatal period, where men reported to lack direction, guidance or support in their fatherhood journey.

Experiences of fatherhood

Men described their experiences of the early postnatal period, which related to increased tiredness, sleep deprivation, stress and anxiety. Men recognised that during this period their mood could fluctuate and result in them feeling “snappy, angry and impatient”. New fathers also worried about their increased financial responsibility and not being able to spend enough time with their child, again similar to previously reported findings (Baldwin et al., 2018; 2019). For some men, going back to work after two weeks paternity leave was hard, and it was something that they were not prepared for. Two weeks statutory paternity leave was not considered to allow fathers enough time to bond with their baby and some men found the separation from their baby emotionally challenging. Fathers not wanting to ‘miss out’ on their child’s development and ‘feeling they were abandoning their partner and new child at a time when they were needed’ have also been reported in other recent studies (Birkett and Forbes, 2019; Baldwin et al., 2019). This is an interesting finding because it is commonplace for health visitors to prepare mothers for going back to work after having a baby (DH, 2009), but in this study none of the fathers were offered any support for this.

To help eligible parents to better combine work with family life, 'Shared Parental Leave' (SPL) was introduced in the UK in 2015 (UK Government, 2018). SPL is not available for fathers in insecure jobs such as zero-hour contracts or agency work. For eligible couples, it means that mothers can cut their maternity-leave short (after the mandatory recovery period within maternity leave) and share the remainder of their entitlement (up to 50 weeks) with their partner as SPL (UK Government, 2018). Despite this, the uptake of SPL was only 1% in 2017/2018 (Birkett and Forbes, 2018). Poor policy communication at an organisational level, perceived policy complexity, and societal expectations around maternal and paternal roles have been identified as reasons for the low uptake (Birkett and Forbes, 2019). It has also been reported that factors such as socio-economic position; education; ethnic background; and whether the parents had previous children also played an important role in the way in which people understood and responded to policies designed to increase fathers' involvement in childcare (Twamley and Schober, 2019). SPL was not mentioned by any of the fathers interviewed in this study, and therefore it is not known whether they were aware of it or whether they had even considered it.

Many fathers felt that they neglected their own health needs during the perinatal period and were particularly concerned about their physical weight gain. While the area of perinatal weight gain in mothers is well-researched and understood, weight gain in fathers during this period is less recognised. Through a literature review, Saxbe et al. (2018) identified a number of mechanisms that may contribute to paternal weight gain in the perinatal period. They included behavioural mechanisms such as sleep deprivation, lack of physical activity, and increased calorie diets; hormonal mechanisms such as decreased testosterone and increased cortisol levels; and psychological mechanisms such as depression and stress (Saxbe et al., 2018). While these notions have not yet been tested, weight gain in expectant and new fathers is a serious public health issue, which may have

lifelong health implications for men and their families. There is also a link between physical and mental health, an area that would benefit from further research.

Fathers found the experience of supporting their partner with breastfeeding to be quite challenging due to inadequate support and conflicting advice received from health professionals. Providing fathers with appropriate information about breastfeeding prior to the birth of their baby and planned, ongoing support following the birth to ensure that they can better support their partners was highlighted as a need in previous studies (Dolan and Coe, 2011; Poh et al, 2014; Sherriff et al., 2014; Hansen et al., 2018; Mahesh et al., 2018) and our systematic review (Baldwin et al., 2018). If fathers are able to provide better support to their partners then breastfeeding is likely to be more successful and women are likely to feel more confident with breastfeeding (Mannion et al., 2013).

Mental health and wellbeing

The vast majority of fathers were not asked any questions by the health visitor about their own mental health and wellbeing during the antenatal or postnatal contact. Where health visitors enquired about fathers' own wellbeing, they tended to ask general questions "in a soft way" or "light-hearted way" about how they were sleeping or coping, rather than direct questions women are asked as per NICE guidelines (2014). Findings from our qualitative study (Baldwin et al., 2019) suggested that fathers wanted to be asked questions regarding their own mental health and wellbeing, and most fathers would be willing to speak to health professionals if they knew that the health professional's role involved supporting the father as well as the mother and baby. Therefore, health visitors not asking direct questions about men's mental health, or only occasionally casually enquiring about their health and wellbeing, means that they would be unlikely to identify the fathers' mental health needs. This has major implications for providing an equitable service to both parents and supporting their mental health and wellbeing.

Fathers not being informed about appointments in the antenatal and postnatal period with midwives and health visitors were the main reason for them not attending these appointments with their partners, again suggesting that simply inviting fathers could increase their participation.

Lack of communication with fathers by health professionals and fathers being "invisible" in the available information resources, such as posters and leaflets were identified as barriers to fathers knowing about what resources or services are accessible to them. Exclusion from antenatal appointments, antenatal classes and by the available literature, were identified as gaps in the preparation of fathers for fatherhood by Deave and colleagues in a UK study in 2008. Twelve years on, this gap still remains, which was also highlighted in our previous studies (Baldwin et al., 2018; 2019). Health professionals not treating fathers with equal importance as mothers, or as equal partners during the perinatal period acted as a barrier, preventing them from feeling involved.

Similar to previously reported findings, men wanted access to tailored information for fathers relating to the changes and adjustments in the transition to fatherhood; caring for their babies; and access to fathers' groups and support services (Baldwin et al, 2018; 2019). Men also wanted to be acknowledged by health professionals and asked about their own mental health and wellbeing. It was clear that men wanted support to be available for fathers throughout the perinatal period, some suggesting routine appointments for 'fathers only' or 'father only support groups', while others, a combination of joint appointments with their partner, communication via email or social media platforms, and open access to a professional helpline throughout the perinatal period. Better facilities in the postnatal ward was highlighted as a gap, which has also been identified in previous studies (Symon et al., 2011; Baldwin et al., 2019).

Experience of the research process

Men's main motivation for participating in this study was their personal interest in the research topic, and wanting to share their own experiences to help others, rather the gift voucher offered. Other studies have also found incentives not to be related to response rates (Baruch and Holtom, 2008), instead a lower number of reminders with personalised e-mail messages were more effective in getting participants to respond to web-based questionnaires (Sánchez-Fernández et al., 2012), which were strategies used in the current study.

Feedback from the fathers interviewed suggests that completing the questionnaires in the antenatal and postnatal period was straightforward. For some it also had a beneficial impact where completing the questionnaires provided an opportunity for them to reflect and acknowledge their own feeling during a time of considerable change in their lives. Other benefits included fathers being able to access additional resources through the study website and feeling that their views as 'fathers' were being recognised and considered. Participants feeling more confident and a sense of personal achievement through the engagement with research teams has also been reported previously (Attree et al., 2010). All men were happy with the way the research was conducted and the communication they had with the researcher. Keeping fathers informed about every stage of the study, along with setting out clear expectations from the outset were viewed to be particularly valued.

7.5.4 Feedback from Health Visitors

Only a few of the health visitors in this study asked fathers direct questions about their mental health, others asked general questions about the fathers' wellbeing, if he was present. Some health visitors reported to prioritise maternal mental health

over paternal. These findings are consistent with the fathers' accounts of not being asked direct questions about their mental health, as discussed earlier. This suggests that enquiring about paternal mental health is not part of routine health visiting practice. For this to change, further work is necessary and needs to include staff training as well as organisational support and commitment.

All health visitors participating in the study were trained in the Promotional Guide system and were in receipt of at least two to three types on supervision in practice, which were identified as key components for delivering the intervention, as discussed in Chapter 6 of this thesis.

In both study sites, the Promotional Guides system was implemented to be offered in two of the five Universal contacts: antenatal health promoting visit and six to eight week assessment (PHE, 2018a), however in practice this did not happen. In one site, only the Antenatal Promotional Guide was used by health visitors on a targeted basis for families who had additional needs such as safeguarding, mental health, domestic violence etc. The practice whether to use the intervention or not was based on the individual health visitor's professional judgement. In the other site, health visitors used the Antenatal and Postnatal Promotional Guides, but the practice was ad hoc rather than routine and varied considerably between practitioners. Some used them with all parents, while others used them only antenatally, when time allowed or when they felt it was necessary in their professional opinion. This practice was also confirmed by the observations carried out, six of which were for antenatal contacts and only one for postnatal. These findings are not surprising, considering the results of the latest survey carried out by the Institute of health visiting highlighting the increased caseloads of UK health visitors, where only 34% reported to offer the mandated antenatal contact to all families, with 22% only offering it to those considered to be vulnerable with additional needs (IHV, 2020).

In both study sites, some invitation letters for the Promotional Guide appointments were addressed to ‘parents’ or ‘parents-to-be’ but neither site had a system for explicitly inviting fathers. A few health visitors used their own initiative to invite fathers by phone or letter, but this was not routine practice at either site. This explains the previous findings reported by fathers, where only a small number of men were invited to attend the antenatal and postnatal health visitor appointment with their partner.

When health visitors did use the Promotional Guide system, they used the topic cards as a basis of their conversation, giving parents the choice to pick the topics that they wanted to discuss, as intended by the programme. Where fathers were present, they were included in the discussions and encouraged to participate. When both the mother and father was present, health visitors used their professional skills to manage the time between both parents, prioritising their time for the person who needed it more. They also made assessments of the appropriateness of talking to both parents together and where necessary arranged separate appointments (such as in cases of domestic abuse). When fathers were less vocal than their partner, health visitors encouraged them to participate and ask questions to ensure that they felt involved, which was also observed by the researcher during the observations. The findings suggest that health visitors used their ‘professional skills’ and a ‘partnership approach’ to using the Promotional Guides as outlined by the programme.

No unintended intervention outcomes were reported by health visitors in this study. Health visitors spoke positively about the Promotional Guide topic cards, which acted as prompts, while providing parents with the freedom to choose the topics they wanted to discuss. Health visitors also considered the intervention to be inclusive of fathers, however they often experienced challenges of using them routinely due to time constraints and the increased demands of the services,

reflecting the national picture (IHV, 2020). This also resulted in the intervention not being offered to fathers.

Other barriers to using the Promotional Guides system with fathers included not being able to access fathers due to their work commitments, and language and cultural differences. Some health visitors held the view that fathers from certain cultures perceived childbirth and childrearing to be related to the mother only, and highlighted this as a barrier to men engaging or getting involving in the antenatal and postnatal health visitor appointment. Interestingly, as discussed earlier, men in this study highlighted this view held by health professionals to act as a barrier to involving fathers in contacts during the perinatal period. This suggests that health professionals may be holding on to the more traditional 'breadwinner role' of fathers, which could be preventing them from engaging effectively with men from certain cultures during this period.

Facilitators for using the Promotional Guides system with fathers included informing fathers that the intervention was aimed at both parents; explicitly inviting fathers along with mothers; sending them appointments in advance; being able to offer the appointment in home settings, being allowed to dedicate adequate time to deliver the intervention and to have continuity of care (the same health visitor delivering the antenatal and postnatal visit). This however is likely to be challenging in the current climate, where only 35% of health visitors report to be able to offer continuity of carer to all or most families nationally, a figure which has fallen from 65% in 2015 (IHV, 2020). The lack of routine use of the Promotional Guide system by health visitors in this study is perhaps reflective of this national picture where health visiting numbers have declined drastically over the past four years. The reduced health visiting workforce having to prioritise working with the most vulnerable families, resulting in a universal health visiting service not being

provided to all families as set out in Public Health England's Commissioning Guidance (IHV, 2019a).

Health visitors identified a lack of management support and organisation policy or guidance for the use of the Promotional Guide system within their organisation. There was also no system for monitoring uptake or impact, which was considered a major gap in the implementation process of the intervention. According to Day et al. (2014), co-ordinated action is required by service managers for the use of Promotional Guides to be effective and sustainable, which should include having clear operational guidance as well as guidance for systems for monitoring routine use and impact of the Guide. This was also highlighted in a UK based qualitative study of nine health visitors, which identified factors affecting the implementation of the Promotional Guide in practice (Morton and Wigley, 2014). Barriers to implementation included the lack of integration of client needs with their organisational agenda, lack of organisational compliance, and lack of appropriate recording and monitoring systems for Promotional Guides (Morton and Wigley, 2014). All of these issues appeared to be factors affecting implementation in both sites in the current study. Similar to the findings of the current study, Morton and Wigley (2014) reported that health visitors favoured the partnership approach used as part of the Promotional Guide practice, which enhanced their practice, also reported by Barlow and Coe (2013) in their evaluation study of the level of implementation and stakeholder perceptions. It is therefore important to have a clear implementation strategy in each organisation and operational guidance that explains "*how the content, timing and duration of Promotional Guide contacts and resulting family strengths and needs analysis and assessment should be recorded*" (Day et al., 2014, p-.667).

While all health visitors had received the initial Promotional Guide training, they did not have refresher courses and were concerned that the lack of routine use would

de-skill their practice. This highlights the need for ongoing training and support for health visitors in the use of Promotional Guides to ensure skill development and maintenance. Health visitors raised concerns about not being able to offer fathers with any support if they required it due to a lack of knowledge about what was available to them. Therefore, making health visitors aware of the support services that are available to fathers in the local area, either through training or supervision sessions, could facilitate better support being offered to fathers.

The 'Family Strengths and Needs Summary' was identified as an essential component of the intervention and findings from the current study showed that two thirds of the health visitors were not completing it at all. Furthermore, none of the health visitors were aware of the 'Family Map', which was introduced to the Promotional Guide programme in 2016, which reflects the lack of ongoing training or refresher courses relating to the intervention highlighted by the health visitors.

A logic model was developed in Chapter 6 (page - 243), to explain how the Promotional Guide system worked and what changes it expected to deliver. The Criteria for Reporting the Development and Evaluation of Complex Interventions (CReDECI 2) was completed (Appendix - 42) to ensure that all relevant methodological aspects that are needed to be reported during the evaluation of a complex intervention was covered in this study (Mohler et al., 2015). Based on the findings from this study the logic model has been updated (Appendix - 43) to identify exactly where the gaps were in the multiple levels of influence in the implementation process. Using an ecological perspective (Appendix – 22) allowed the identification of the two main factors that prevented effective implementation of this intervention in the two study sites. They relate to organisational, community and public policy level rather than individual or interpersonal. In other words, it was the lack of organisational support, investment in and commitment to the intervention that has led to inconsistency in staff training and support (no refresher

courses, no policies or guidelines to inform practice), which resulted in inconsistent practice in relation to the way in which the intervention is offered (targeted offer, some only offered antenatally etc.) and delivered (inadequate time allocated to visit, inconsistent use of resources).

The organisation operates in the context of the national picture. Health visiting provision in England is locally commissioned (in contrast to the devolved nations), leaving vital decisions to local government members. According to the Institute of Health Visiting (IHV), "*whilst there have been some examples of good commissioning in recent years, even senior Directors of Public Health recognise that commissioning in some areas is not as good as it could be*" (IHV, 2019b, p-11). This means that the key performance indicators (KPIs) set by the local commissioners and the quality of support that families receive could vary significantly. The health visitors in this study often worried about meeting the KPIs set by their local commissioners and adjusted their practice accordingly. By prioritising KPIs over providing a 'meaningful service' increases the risk of simply "*ticking the box, but missing the point*" as highlighted in the Position Statement issued by IHV in July 2019 (IHV, 2019a). In order for the Promotional Guide system to be implemented properly and its benefits to be assessed, senior health visiting managers and leaders need to have a better understanding of the intervention and how it may have the potential to support both the mother and father's transition to parenthood. "*When the contribution of Promotional Guide practice is unclear to senior managers, there is a risk that resources and investment will be directed elsewhere and the achievements and impact of practitioners using the Guides will be undervalued and overlooked*" (Day et al., 2014, p-665). Senior managers and leaders need to ensure that the use of Promotional Guides is aligned to the commissioning priorities so that local policies and guidance can be developed to support health visitors in practice. It is also essential that adequate monitoring systems are in place so that the intervention fidelity and impact can be evaluated. This is likely to make the delivery of the

Promotional Guide system more meaningful to both practitioners and parents, rather than the inconsistent way in which it is currently being delivered in the two study sites.

As well as the health visiting workload pressures, the lack of evidence on the effectiveness of the current Promotional Guide system may explain the poor engagement, commitment and support offered by senior managers in the two study sites. This raises the question as to why health interventions are rolled out without a robust evidence base. As discussed earlier in Chapter 1 (page- 33), the Family Nurse Partnership was rolled out widely across the UK with minimal evidence of benefit in a UK population. Health interventions rolled out in this way have major cost and resource implications for the NHS, and highlight the importance of implementation research which should include appropriate shorter and longer term follow-up to ensure that the intervention is effective in achieving the desired outcomes in the target population, prior to full implementation (Wensing and Grol, 2019). According to Wight et al. (2016), six crucial steps need to be undertaken during an intervention development process, referred to as 6SQuID (6 Steps for Quality Intervention Development). These include defining and understanding the problem and its causes; identifying which causal or contextual factors are modifiable: which have the greatest scope for change and who would benefit most; deciding on the mechanisms of change; clarifying how these will be delivered; testing and adapting the intervention; and collecting sufficient evidence of effectiveness to proceed to a rigorous evaluation. In the Promotional Guide development process, it appears that some of these key steps have not been considered prior to full implementation. Considering each of these steps in the development of future interventions can ensure "*better use of scarce public resources by avoiding the costly evaluation, or implementation, of unpromising interventions*" (Wight et al., 2016, p-520).

7.5.5 Sample Size Calculation for a Future Study

Sample size for a future trial was calculated based on minimally important level of change (MILC) for SWEMWBS, with support from a statistician (Mr Trevor Murrells). The sample size calculated for SWEMWBS would also be sufficient to test for difference in mental health (GAD-7) and well-being (EPDS). It is however acknowledged that a trial would not be recommended until a clear plan is put in place to improve implementation of the Promotional Guide system with fathers.

7.6 Strengths and Limitations

There are several strengths associated with this study. Firstly, the recruitment and retention rates suggest that the participants, both first-time fathers and health visitors found being involved in the study acceptable and did not disapprove of the aims of the study. The recruitment strategies employed were effective in the recruitment of first-time fathers from diverse backgrounds. Fathers reported the research process to be acceptable and it was feasible to collect the outcomes measures using the selected scales. This study has also demonstrated the value of using different scales for measuring mental health and wellbeing in fathers, where consistent results were found across the scales. A further strength of this study was the acceptability of the Promotional Guide system by health visitors, as reported in the interviews. They identified facilitators and barriers to using this intervention with fathers which can inform future practice and research.

Study limitations included not being able to report on the impact of the Promotional Guide system due to the intervention not being implemented fully. The qualitative interviews were carried out on a voluntary basis and six fathers who reported to receive the intervention at one point in time did not volunteer to be interviewed. This is despite three of them being invited to participate (the other three indicated

in the postnatal questionnaire that they did not want to be interviewed). Therefore, it is not possible to report on their experience of the intervention, whether it was acceptable to them, their willingness to engage with it or even confirm whether they received it in the first place.

Similarly, health visitors' participation in the interviews and observations were also voluntary, and may not represent the views and practices of all health visitors in the two NHS organisations. It is possible that only those who were more proactive and/or confident in using the Promotional Guides volunteered to take part. Furthermore, it is acknowledged that there are some limitations associated with the non-participant observation approach used in this study. Health visitors being observed by the researcher (who is also a trained health visitor), may have led the participants to behave differently, a phenomenon referred to as the Hawthorne effect. In this case it is possible that health visitors used the Promotional Guides comprehensively to the best of their ability during the observation, when that may not be their usual practice. However, health visitors not using the 'Family Strengths and Needs Summary' or the 'Family Map' during the observations (which were identified as key intervention components), suggests that health visitors were unaware of these resources, as discussed previously.

Other limitations of this study include the small sample size. However, it should be acknowledged that this was a feasibility study and therefore sample size requirements were much lower than for a fully powered study needed for robust statistical inference (Teare et al., 2014). Randomisation was never intended because of the nature of the intervention and ethical issues concerning the use of a control group (see 7.3 Method). The purpose of this study was to enhance knowledge relating to the feasibility and acceptability of the Promotional Guide system, recruitment strategies, outcome measures and participant retention rates. Thus, several revisions are recommended prior to future research which are

provided below in section 7.7.2. Findings from this feasibility study have also resulted in several recommendations for practice, as discussed below.

7.7 Recommendations for Practice

The recommendations have been divided into two sections, one focusing on first-time fathers' mental health and wellbeing and the other on the effective implementation of the Promotional Guide system.

7.7.1. Recommendations for supporting first-time fathers' mental health and wellbeing:

- Fathers should be explicitly invited to antenatal and postnatal appointments with the health visitor and informed that the appointment is for the father as well as the mother.
- Fathers should be included in antenatal and postnatal consultations with health professionals, along with the mother, and treated as equal partners.
- Health visitors should avoid making assumptions that men perceive perinatal health services to be for 'women only', as this could act as a barrier to involving fathers.
- Health visitors should enquire about fathers' mental health and wellbeing, and ask direct questions as they do with mothers. Men are then more likely to express their own needs and engage further.
- There is a need for fathers' mental and health and wellbeing to be included in national guidance, and mental health assessments to form part of routine care offered to fathers in the perinatal period because fathers want to be asked about their mental health and wellbeing.
- Health visitors should help new fathers prepare for the changes in fatherhood and provide information and support in areas including

breastfeeding, fathers' own physical and mental health, attachment and bonding with their baby, and SPL rights and going back to work.

- Fathers should be provided with details of all available support and resources including local support groups, websites, and helplines by health professionals in the perinatal period. For this health professionals need to be aware of services available for fathers.
- There is a need for better service provision and support for fathers, especially in the postnatal period. Health visitors In England are ideally placed to support fathers during their routine five contacts, along with the mother and family. For this to happen organisational and government level support and guidance is required.

7.7.2. Recommendations for using the Promotional Guide system with fathers:

- A consistent approach to the delivery of the Promotional Guide system is required. For this to happen improvements need to be made at organisational, policy level and practitioner level.
- Health visitors using the Promotional Guide system with fathers (and mothers) should inform them about the intervention and that it is designed for the mother and father, which is likely to increase engagement.
- When using the Promotional Guide system, health visitors need to ensure that they use all materials/ resources designed for use in the intervention.
- Organisational policies should clarify expectations around Promotional Guide use with fathers; its content, duration and timing; and have robust recording and monitoring systems in place.
- Regular staff training, updates and supervision for the Promotional Guide system needs to be embedded in practice, to include the use of 'Family Strengths and Needs Summary' and 'Family Map'.
- Health visiting leaders and managers need to ensure that data is collected on Promotional Guide use and outcomes reviewed. These should be

reported to commissioners to inform future commissioning priorities and decisions.

7.8 Recommendations for Research

- Further research in needed to assess the effectiveness of the Promotional Guide system used by health visitors with mothers and fathers. For this to happen the implementation gaps identified in this study need to be addressed first.
- Once the Promotional Guides are fully implemented, further research could be undertaken to assess the effectiveness of this intervention. For this, the outcome measures and the sample size calculations from this study could be utilised.
- For future process evaluation of the Promotional Guide system, interviews with fathers following the Antenatal Promotional Guide contact could be useful.
- There is also little known about fathers' physical health and weight gain in perinatal period and its relationship with mental health and wellbeing during this period. This is an area that would benefit from further research.
- More fathers should be included in child health research to address the current gaps. The research strategies used in this study could help inform the recruitment and retention of fathers from diverse backgrounds.

7.9 Chapter Summary

This chapter described the final phase of the study. It considered the feasibility of conducting a future large trial to determine the effectiveness of using the Promotional Guide system with first-time fathers, which was assessed in two different areas of London. It also included a nested process evaluation to consider the acceptability, feasibility and fidelity of programme delivery from the fathers and health visitor's perspectives. The findings provided an Insight into men's

experiences of first-time fatherhood, their contacts with health professionals during the perinatal period and their experience of the research process. Triangulation of data collection was achieved through questionnaires completed by fathers, interviews with fathers, interviews with health visitors, and observation of health visitors using the intervention in practice. Feedback from fathers, health visitors and the observation findings were consistent in relation to engagement and involvement, mental health enquiry and promotional guide use. This study identified a number of barriers and facilitators to the use of Promotional Guides with fathers.

Using a logic model, it was possible to identify exactly where the gaps in the delivery of the Promotional Guide system were within the implementation process. Recommendations were made for improving services for first-time fathers, implementing the Promotional Guide system with fathers and highlighted areas for future research. Recommendations from this study could inform improved health visiting practices to better support fathers' mental health and wellbeing during the perinatal period.

CHAPTER 8: OVERALL DISCUSSION, CONCLUSION & REFLECTIONS

8.1 Summary of Thesis

This PhD thesis explored the mental health and wellbeing of men as they became fathers for the first-time and tested the feasibility and acceptability of the Promotional Guide system. Chapters 1 and 2 provided the introduction and background to the study, while Chapter 3 outlined the research design and methodology. The qualitative systematic review undertaken in study p*hase I*, presented in Chapter 4 explored first-time fathers' mental health and wellbeing needs. It provided an overview of existing evidence and highlighted gaps in the current literature, which informed study *phase II*, a qualitative exploratory study presented in Chapter 5. This study explored the gaps from the systematic review, identified first-time fathers' mental health and wellbeing needs, adding further to the current evidence-base in this subject area. In Chapter 6 the Promotional Guide system was discussed and the findings from *phase I and II* of the study were mapped against the intervention. Through the development of a 'theory for change' and a 'logic model', a case was presented for how the intervention had the potential to impact positively on first-time fathers' mental health and wellbeing, which informed the feasibility study and process evaluation in *phase III*, discussed in Chapter 7.

Using a social ecological framework (Bronfenbrenner, 1977) to develop the logic model enabled a better understanding of factors affecting behaviour at different levels of influence. Being a health visitor, this framework was easy for me to conceptualise as health visiting practice takes a 'person-in-context' approach to health improvement based around the Dahlgren and Whitehead (1991) model of 'social determinants of health' (Appendix - 44). This model has been influential in the way in which public health services, including health visiting, are designed,

taking into account all levels of influence and impact on individual's health and wellbeing. The social ecological framework therefore enabled the development of a logic model that considered the influence of the Promotional Guide system at individual, interpersonal, organisational, community and public policy level.

Each chapter of this thesis built on the previous chapter to provide a comprehensive account of the research process, and achieve the successful completion of all three phases of this study. A Gantt chart has been presented in Appendix 45, to show a timeline for the study.

The MRC framework (Craig et al., 2008) was used to structure this study, which has a number of strengths. Firstly, it provided a stepped approach to thinking about the processes involved in complex intervention development and evaluation, which also helped with structuring the chapters within this thesis. The use of the development phase of the MRC framework was helpful in identifying the components and mechanisms that underpinned the Promotional Guide intervention and helped identification and exploration of the theoretical framework supporting the intervention. The development phase in the original MRC guidance was criticised for only providing a brief outline (O'Cathain et al., 2019). To address this, O'Cathain et al. (2019) recently produced guidance on intervention development based on a consensus study, which further enhances the original framework (O'Cathain et al., 2019). Key principles and actions for consideration when developing interventions to improve health were identified to include seeing intervention development as a dynamic iterative process, involving stakeholders, reviewing published research evidence, drawing on existing theories, articulating programme theory, undertaking primary data collection, understanding context, paying attention to future implementation in the real world and designing and refining an intervention using iterative cycles of development with stakeholder input throughout (O'Cathain et al., 2019). All of these factors were taken into

consideration during the evaluation process of the Promotional Guide system in this study and gaps in implementation identified.

The feasibility and testing phase of the MRC framework enabled the testing of intervention procedures, recruitment and retention rates and determine sample size for a future study. However, some limitations of the MRC framework (Craig et al., 2008) were noted during the evaluation phase. While this framework recognised the value of process evaluation, it did not provide any guidance on how to undertake it. To address this, the framework developed by Moore et al., in 2015 was utilised to guide the process evaluation for the Promotional Guide system. Using the Criteria for Reporting the Development and Evaluation of Complex Interventions (CReDECI 2) in this thesis ensured that all relevant methodological aspects that needed to be reported during the evaluation process were incorporated (Mohler et al., 2015).

Using a combination of quantitative and qualitative data collection, through different methods (face-to-face interviews, telephone interviews, questionnaires, observation) from first-time fathers and health visitors was considered to enhance the study findings.

The findings from this study contribute to the current body of literature on fathers' mental health and wellbeing. It provides an insight into how first-time fathers want to be better prepared for fatherhood and better supported by health professionals throughout the perinatal period. Fathers in this study wanted health professionals to enquire about their mental health and wellbeing, and offer appropriate advice and support. This study also adds to building an evidence base for the Promotional Guide system, and identified keys gaps in the implementation of this intervention, not only with fathers, but also with mothers. It is essential that these implementation gaps are addressed prior to any future research into the

Promotional Guide system. These findings have a number of implications for research, health professionals, health service managers, commissioners and policy makers, discussed in section 8.4.

8.2 Overall NEST Strengths and Limitations

Strengths and limitations of the individual studies are described in the chapters relating to each study phase. Here strengths and limitations of the overall study have been identified.

8.2.1 Strengths:

- The qualitative systematic review (Baldwin et al., 2018) undertaken as part of this PhD was the first of its kind, contributing to the current evidence base for fathers' mental health and wellbeing.
- Recommendations based on the systematic review findings can inform how maternity, health visiting, and early years services are planned, provided and resourced, in order to better support fathers' mental health and wellbeing, which in turn is likely to impact positively on the whole family.
- Fathers have often been reported to be under-represented in health research. The recruitment strategies employed in study *phase II and III* were successful in recruiting the planned number of fathers for this study.
- Men participating in research studies are typically reported to be white, middle class, and married. In both the qualitative study (Baldwin et al., 2019; Chapter 5) and the feasibility study (Chapter 7), first-time fathers were recruited from diverse ethnic, religious and socio-economic backgrounds, many of whom were not married.

- The continuous Patient and Public Involvement (PPI) throughout this project, has creatively added to the success of the study and contributed to it being more acceptable to first-time fathers.
- The qualitative study (Baldwin et al., 2019) reported similar mental health and wellbeing needs of first-time fathers from different age, ethnic and income groups as well as resident and non-resident fathers. These findings contribute to the current evidence-base in this area.
- The mixed-methods used in study *phase III* enabled better understanding of the intervention and its implementation process, therefore enhancing the quality of the study findings.
- The use of triangulation in data collection showed consistency in the findings (i.e. what health visitors said they did and what they were observed to do were consistent), therefore considered a good approach to this type of research.
- Taking part in the study had a beneficial impact on the fathers. Completing the research questionnaires in study *phase III* gave men an opportunity to reflect on, and acknowledge, their own feelings relating to fatherhood. By asking fathers about their views enabled them to feel valued and appreciated.
- The study website ('Resources' section) provided men with useful information and support resources designed specifically for fathers, which continue to be disseminated through health professionals, and accessed by parents in UK.

8.2.2 Limitations:

- This study was carried out across four London boroughs (two inner city and two suburban) served by two NHS organisations. The views and experiences of these fathers may not be representative of men from other parts of the country. However, the sites were chosen carefully as they served diverse socio-economic and cultural populations, with minority ethnic

groups representing 44%–69% of the overall total population of the borough selected (ONS, 2011).

- The intervention (Promotional Guide system) was tested within two NHS organisations, therefore the use of the intervention in this study may not be reflective of the use in other NHS organisations in England.
- Fathers from certain groups were under-represented in this study, such as those unemployed, non-biological, or non-resident.
- Non-English speaking fathers were excluded from this study and their mental health and wellbeing needs remain unknown.
- In study *phase III*, none of the fathers received the full intervention, therefore it was not possible to report the acceptability of the intervention by first-time fathers.
- It was not possible to carry out the number of observations for the health visitor-father Promotional Guide contact originally planned in study *phase III*, due to the intervention not being used routinely in one study site.
- Only one father reporting to receive the intervention at one point in time was interviewed in study *phase III*. Not being able to interview the other six fathers also reporting to receive the intervention at one time point is seen as a limitation of this study.

8.3 Reflections on the Research Process

It is acknowledged that there is risk of potential bias resulting from the researcher being a midwife, health visitor and mother. Being reflexive and conscious of my own prejudices and assumptions were steps taken to minimise this. As a trained nurse, reflection has always formed part of my practice, however as a researcher I had to ensure that I was also reflexive throughout the research process. Reflection is the process of making sense of an experience in order to learn and improve as a practitioner (Fairley-Murdoch and Ingram, 2017), which involves ‘thinking about’

the event after it has occurred. Reflexivity on the other hand is more of an immediate dialogue with yourself (the researcher), to provide more effective and impartial analysis. To be reflexive has been described as "*to have an ongoing conversation about the experience while simultaneously living in the moment*" (Hertz, 1997, page-viii). I regularly reflected on my practice and acknowledged the assumptions and preconceptions I may bring into the research, that could impact on the outcomes. The men in the PPI group in particular helped me with this process, and enabled me to regularly consider issues from a different perspective, which have often been challenging, while also generating stimulating discussions within the PPI meetings.

For example, in the early stages of this study I had made assumptions that it would be very hard to get fathers involved in research and that they may not openly talk to me about their mental health and wellbeing. These were predominantly based on my knowledge of the lack of existing research with fathers and my experience as a health visitor, where fathers were rarely present. When I discussed this with first-time fathers in the PPI meetings, they suggested that I approach this with a different mindset and that asking direct questions may yield better results when recruiting fathers. As a result, I made a conscious effort not to treat men differently and ask them directly whether they wanted to participate rather than make assumptions about them not wanting to. I was surprised to find that new fathers were very happy to participate and talk openly about their mental health. They just wanted to be asked.

Similarly, I presumed being a female researcher had the potential to affect the way in which men responded to me but throughout the research process what I found to be more important was having a good rapport with the participant fathers, rather than whether I was male or female. It was about using good communication skills and actively listening to their experiences, which in turn also made the fathers feel

acknowledged and valued, as discussed earlier. Ensuring that the men who participated in the study were kept informed and involved about every step of the research process was also key to maintaining a good participant-researcher relationship. Men were given details about the research from the outset, including the timescales and expectations. Once the interviews were completed, they were sent the transcript to comment on, and the preliminary findings upon completion of the data analysis. This was to ensure that I had not misinterpreted what they had said and that their views were accurately represented. The qualitative study in *phase II* (Baldwin et al., 2019) was also shared with the participants prior to and after publication. Feedback from some of the fathers can be found in Appendix – 46.

Many fathers have since sent me email updates of their fatherhood journey. This suggests that by sharing some of their personal views and experiences during a time of significant transition in their lives, meant that they valued the relationship they built with me as a researcher. This made me realise that as a researcher I was also in quite a privileged position to be given access into their personal stories.

Reflection played a big role in my personal learning of the research process and influenced my subsequent research practice. An example of this was the way in which fathers were recruited. On one occasion I approached a father in a child health clinic setting to talk about the study. Very quickly it was apparent that his partner (the baby's mother) wanted me to speak to her first instead of her husband. Once she was happy with the information she received, she then got her husband involved. There are a number of possible explanations for this. It could be that, as it was in an environment that has traditionally focussed solely on babies and their mothers, she felt that it was her place rather than her husband's to take the lead in any conversations with healthcare professionals. In some cultures, male interaction with females outside the home environment may not be seen as appropriate, which

could be another explanation. It is also possible that she may have viewed this unknown woman talking to her husband with some degree of suspicion. Mothers acting as ‘‘gatekeepers,’’ regulating paternal involvement in research has been reported in other literature (Mitchell et al., 2007), posing a challenge for researchers recruiting fathers (Fagan and Barnett, 2003). Reflecting on this situation made me realise that approaching fathers alone without their partner was possibly not the best approach, and that involving both parents may be a better way forward.

Similarly, during the qualitative interviews some mothers wanted to be present in the room, some repeatedly ‘popped in’ during the interview, while others were happy for the interview with their partner to be undertaken privately without their presence. Reflexive journals were kept for each interview. I was aware that the interviews conducted with their partners present may alter the responses of the fathers or they may not feel comfortable to talk openly about their personal experiences. These factors were taken into consideration when analysing the data, however no such patterns were noted.

Being a researcher and a healthcare professional came with the responsibility to provide support to participants in any adverse event. During one interview, I was concerned about a man’s increased levels of stress and lack of support that he reported to have. I was able to provide him with information for further support and how he could access services. There were a number of occasions where I had to provide additional information or refer men to specialist services, these have been outlined in table 4, in Chapter 3.

Throughout the research process, I had to also ensure my own safety and wellbeing as a researcher, especially as I carried out many of the interviews in the

participant's home setting. For this, the NHS trusts' and University Lone Worker Policy was followed.

The fathers in the PPI group were an important part of this study and although the membership of this group changed during the course, the continuous involvement of first-time fathers helped to keep the study grounded. Their expertise and experiences of being a first-time father, ensured the research questions were relevant and that the priorities reflected the needs of other first-time fathers. Their regular input ensured the research was conducted in a way that was sensitive to the needs and preferences of the study participants, and that all research material was written using lay language. The discussions with this group of men helped me critically question and examine some of my own views and helped me change my approach to working with men, enhancing my personal and professional learning.

The principles of reflection were incorporated throughout this PhD and regular clinical supervision with a clinical supervisor, along with discussions with my academic supervisors ensured that I was able to carry out this research in a structured and effective manner.

8.4 Implications for Research

- First-time fathers have varying needs during their transition to fatherhood, that can impact on their mental health and wellbeing. There is currently little known about hormonal changes and weight gain in fathers during this period, which would benefit from more research.
- Certain groups of fathers were under-represented in this study, namely those unemployed, non-resident, non-biological and non-English speaking fathers. Further research involving these groups of fathers would provide a more comprehensive understanding of first-time fathers' mental health and wellbeing needs.

- This study highlights the importance of carrying out feasibility testing and process evaluations prior to a large trial, which can be costly.
- Implementation research plays an important role in the effective delivery of complex interventions and therefore when evaluating complex interventions, the implementation process also needs to be considered.
- PPI should be part of all research carried out into first-time fathers as it has the potential for the study to be more acceptable to participants.
- When recruiting new fathers for research, it is important to also consider the mother, as getting both parents on board is likely to add to the success.
- Telephone interviews were preferable for fathers at work as it provided them with more flexibility around participation. This mode should be considered to encourage men to participate in healthcare research.
- The outcome measures used in this study were acceptable to fathers and could be used for future studies considering men's mental health and wellbeing in the perinatal period.
- In this study men were only interviewed once in the postnatal period, 2-4 months after the birth of their baby. Their accounts of their experiences of the antenatal period may not be as accurate due to the elapsed timeframe. There may have been different findings if they had been interviewed at different points in their journey, such as after the Antenatal Promotional Guide contact, as well as in the postnatal period, which could possibly have provided a much better picture of their experiences.
- The implementation gaps identified in this study should be addressed prior to a full-scale trial.
- There is a need for more research into the Promotional Guide system and its impact not only on the father but also the mother, as little is known about its effectiveness in relation to improving mental health and wellbeing during the perinatal period.
- Future research of the Promotional Guide system should incorporate in-depth economic analysis to assess potential cost-effectiveness, which is

likely to make the intervention more attractive to health service managers and commissioners.

8.5 Implications for Practice and Policy

8.5.1 Health Professionals

The implications discussed here relate to health professionals working with fathers during the perinatal period and include health visitors, midwives and GPs.

- Health professionals need to be aware of first-time fathers' mental health and wellbeing needs, and how they would like to be supported during this period.
- Health professionals need to know about all local and national resources and supported that are available for fathers, and offer these routinely to all fathers.
- Fathers are more likely to attend appointments with health professionals if they are invited or if they know that the appointment is for them as well as the mother. Health professionals need to invite fathers exclusively to appointments during the perinatal period if they want them to attend along with the mother.
- In order to support fathers, health professionals need to ask direct questions about fathers' mental health and wellbeing as they do with mothers.
- Fathers need to be included in consultations during the perinatal period, treated as equal partners and provided support to help their transition to parenthood. Specific support relating to the changes following birth, breastfeeding, attachment/ bonding, and going back to work were highlighted by fathers in this study.
- Some professionals may need additional training to support fathers' mental health and wellbeing, which should be identified locally and form part of individual professional development plans.

- Health visitors trained in using the Promotional Guide system should ensure that the intervention fidelity is maintained, and their own skills and knowledge relating to the intervention is kept up-to-date. For this training up-dates and regular supervision should be accessed. Where there is a gap in these being offered, health visitors should inform their managers, highlighting the risk.

8.5.2. Health Service Managers

- Maternity and Early Years managers need to ensure that their services are father-inclusive.
- Systems and processes need to be in place for inviting fathers to appointments in the perinatal period, and for recording information relating to their health and wellbeing.
- Staff working with parents need to have access to appropriate training to enable them to work effectively with fathers.
- If the Promotional Guide system is being offered by the health visiting service then adequate structures need to be in place to support the staff (including policies, resources, training and supervision) and to monitor and evaluate the intervention.
- Managers need to have a better understanding of how the Promotional Guide system works in order to inform commissioning priorities and decisions.

8.5.3 Commissioners

- There is a need for fathers' mental health and wellbeing to be recognised and considered when commissioning health services. Providing better support to fathers is also likely to impact positively on maternal and child outcomes.

- Assessment of new fathers' mental health and providing adequate support to those who need it, should be incorporated in the key performance indicators.
- Expectations around the use of Promotional Guides should be clearly articulated in the Health Visiting Service Specification, in order for the intervention fidelity to be maintained. This should include monitoring reporting expectations, and evaluation processes.

8.5.4 Policy Makers

- Routine assessment of fathers' mental health and wellbeing needs should be included in national policy, outlining which health professional should undertake this.
- Policies should include support for fathers' mental health and wellbeing. Policy makers therefore need to consider how fathers want to be supported and what services they would like to access during the perinatal period.
- If the Promotional Guide system is included in national policies then there needs to be clarity around who it should be offered to (mother and father?), when it should be offered (antenatally and postnatally?), and how the outcomes would be measured.
- Further research is needed to assess the effectiveness of the Promotional Guide system in UK, before it can be considered an evidence-based intervention for improving parental mental health in the perinatal period.

8.6 Dissemination

Dissemination was considered from the outset of the study and various methods were used to disseminate findings at different stages of this PhD. The study website was designed with support from a web designer and went live in October

2016. Since then, there have been 60,958 hits (individual file requests), 17,396 number of visits to the website, by 6,885 'unique visitors', and 26,450 pages viewed until December 2019. The highest number of visits was between September 2018 – January 2019, which corresponds with the dates of publication of the systematic review, the first paper from *phase I* of this thesis (Baldwin et al., 2018) and recruitment for the feasibility study in *phase III*. A breakdown of website data per year is presented in Appendix – 47.

The study website has been accessed by people from many countries, with the top two being Great Britain and United States (see Appendix – 48). Regular blogs were posted on the website to keep the audience updated with any publications, presentations and events relating to NEST (See: www.newdadstudy.com, 'Our News: Stay up to date with our important work' section). The website has proven to be an effective way for disseminating study information, as well as recruiting participants ('Participate' tab) and providing men with information and resources relating to fatherhood and mental health ('Resources' tab).

The work relating to NEST has been presented in a number of local and national conferences. I was a keynote speaker at a national 'Talking Dads' conference in Blackpool in June 2019, which was organised by Better Start Blackpool and attended by fathers, academics, researchers, health practitioners and policy makers. The feedback from this conference was extremely positive, with 96% of delegates stating that they both 'agreed' or 'strongly agreed' that the content was both well-presented and provided information that was relevant and applicable to their work (see Appendix – 49, for feedback letter). In a more recent presentation in September 2019, at a multi-agency conference titled 'Perinatal and Infant Mental Health: Relationships Matter!' organised by the Institute of Health Visiting in collaboration with the Maternal Mental Health Alliance, I was able to speak about my work with fathers and share my learning from NEST. In addition to this I have

presented numerous posters on NEST at professional conferences and won the 'Research Poster Award' at the CPHVA annual professional conference in Bournemouth in 2018. I was shortlisted as a finalist and was awarded 'Third Place' at the Journal of Health Visiting Awards in the category of 'Contributions to Health Visiting Education', for my work around fathers' mental health in March 2019.

A full list of conference presentations can be found on pages 15-16 of this thesis. These presentations and awards have helped raise awareness of NEST and the importance of fathers' mental health and wellbeing during the perinatal period. As well as being able to disseminate the findings from NEST, these experiences have given me national recognition as a clinical academic, especially within health visiting.

Choosing to write a thesis incorporating publications has given me the opportunity to disseminate my work throughout the PhD. The two published papers presented in Chapters 4 and 5 of this thesis were 'open publications' to maximise dissemination. Both papers were shared widely through social media platforms, reaching an international audience. Altmetric Scores, which are scores based on the online attention an article receives, for these articles in December 2019 were:

- Baldwin et al, 2018 = 213, in the 99th percentile, ranked 1st, of the 604th tracked articles of a similar age in all journals, https://journals.lww.com/jbisrir/fulltext/2018/11000/mental_health_and_wellbeing_during_the_transition.10.aspx#
- Baldwin et al, 2019 = 165, In the top 5% of all research outputs scored by Altmetric. https://bmjopen.bmj.com/content/9/9/e030792.altmetrics

I have published other papers relating to this study in professional journals, such as an editorial paper in JBI Database of Systematic Reviews and Implementation Reports (Appendix – 50, co-authored with my supervisor Debra Bick) and another

in the Journal of Health Visiting (Appendix – 51, co-authored with my supervisor Debra Bick).

Throughout the PhD I have written a number of online blogs, been interviewed on social media (YouTube) and have participated in a radio interview to disseminate this study, as outlined In Appendix 52. I have also written several 'Good Practice Points for Health Visitors' for the Institute of Health Visiting relating to perinatal mental health of mothers and fathers, and engaging fathers (Appendices – 53, 54 and 55), as well as 'Parent Tips' for mothers and fathers themselves, providing guidance on how to look after their mental health and wellbeing (Appendix 56 and 57).

The PPI group of fathers were actively involved in disseminating this study from the outset through their social networks and social media platforms. The Institute of Health Visiting Perinatal and Infant Mental Health Forum was used to disseminate the study as well as gain feedback from key stakeholders, such as service users, midwives, health visitors, educators and researchers. The Fatherhood Institute also played a key role in dissemination throughout the study through their website.

8.7 Journey as a Clinical Academic

This PhD, undertaken as part of a NIHR Clinical Doctoral Fellowship has given me the opportunity to develop my skills as a researcher and a clinician. This fellowship included a robust training programme (Appendix - 58) to develop new research skills and prepared me well to undertake the three phases of this study. As well as learning new skills in the research process, I have developed new understanding about fathers' mental health and wellbeing; and complex interventions and their evaluation. I have become more critical in my thinking and feel more confident in

my writing and my ability to contribute to research and influence policy and practice.

Clinically, I have also been able to develop my leadership skills further. In January 2018, a joint NIHR CRN and IHV event was held in London to develop research collaborations to support our Midwifery, Health Visiting and Public Health Specialist community nurses to network and consider new opportunities for sharing and developing research in practice. At the time it was recognised that I was the only health visitor to ever be awarded the NIHR Clinical Doctoral Fellowship (Appendix - 59), and therefore I was invited to speak at this conference. Feedback from this event was extremely positive (Appendix - 60), which helped me to feel more confident in my presentation skills. In 2018, I was appointed as NIHR/IHV Health Visitor Research Champion for NW London Region to support health visitors to increase their involvement in research. In the same year I became the Chairperson for the IHV Perinatal and Infant Mental Health Forum in London.

Conducting work related to first-time fathers' mental health and wellbeing has allowed me to be involved in other projects related to this area. In the final year of my PhD, I was invited to be part of a national 'Expert Reference Group' for developing guidelines and best practice for working with partners and families in perinatal mental health services (the guidelines are due to be published this year). Being able to contribute to this NHS England funded project was a big achievement and the collaborations made during this process have been invaluable. I was a co-applicant on another NIHR grant (Health Services and Delivery Research Programme) for research into the assessment of paternal mental health. This application was being led by other researchers from King's College and Leeds University, and demonstrates the collaborations made during this fellowship.

In the last year I have been invited to speak to various students at three different London universities (see Appendix – 61), which provided me with an opportunity to share the findings from NEST, as well as raise awareness of fathers' mental health and wellbeing during their transition to fatherhood. I am now involved in mentoring a number of midwives and health visitors who are embarking on the NIHR Clinical Academic journey.

Going forward I plan to publish further work stemming from this PhD, starting with the feasibility study and process evaluation presented in Chapter 7. My plan is to continue with research in the area of perinatal mental health and build on the work already undertaken, focussing on fathers' needs in context of the whole family. I intend to follow the NIHR Clinical Academic Pathway, with a view to applying for the Development and Skills Enhancement Award immediately after the completion of this PhD. If successful, it will enable me to develop my research skills further, especially in clinical trials, so that I can consider applying for an Advanced Fellowship to continue with future research. The work I have carried out for this fellowship, together with the training opportunities that it afforded me, has enabled me to become a clinical leader in the field of fathers' mental wellbeing. Through this role I have been involved not only with intervention exploratory and testing research, but also in aspects of national policy and public health. Gaining the NIHR fellowship was an important step in achieving this goal. Being part of the NIHR network has allowed me to share my existing knowledge and skills with others as well as an opportunity to learn from other professionals and academic researchers.

My journey through this PhD has been challenging at times, but I feel I have pursued it with enthusiasm and drive. It has been a great privilege to be able to develop myself further both academically and clinically during this journey whilst contributing to the improvement of healthcare services for fathers, mothers and their families during the perinatal period.

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THE NEW DAD STUDY

A mixed methods feasibility study to improve first-time fathers' transition to fatherhood, their mental health and wellbeing

APPENDICES

APPENDIX - 1

Fifteen High Impact Areas proposed by the Institute of Health Visiting

"To ensure the full scope of the health visiting contribution is recognised and maximised, the existing HIA have been extended to include evidence driven recommendations in "Health for all Children – fifth edition (Emond, 2019)".

1. Transition to parenthood, including preconception care
2. Breastfeeding
3. Perinatal mental health (mothers, fathers and partners)
4. Infant and child mental health
5. Healthy nutrition, physical activity and healthy weight
6. Managing minor illnesses, building health literacy and prevention of Sudden Infant Death Syndrome (SIDS)
7. Reducing unintentional injuries
8. The uptake of immunisations
9. Primary prevention and health promotion in oral health
10. Child development 0-5 years, including speech, language and communication and school readiness
11. Sleep
12. Children with developmental disorders, disabilities and complex health needs
13. Tobacco, alcohol and substance misuse in the perinatal period
14. Healthy couple relationships
15. Teenage parenthood

IHV, 2019 (page – 23)

APPENDIX - 2

Key Recommendations for Process Evaluation

Planning

- Carefully define the parameters of relationships with intervention developers or implementers

  Balance the need for sufficiently good working relationships to allow close observation, against the need to remain credible as independent evaluators

  Agree whether evaluators will take an active role in communicating findings as they emerge (and helping correct implementation challenges) or have a more passive role

- Ensure that the research team has the correct expertise. This may require:

  Expertise in qualitative and quantitative research methods

  Appropriate interdisciplinary theoretical expertise

- Decide the degree of separation or integration between process and outcome evaluation teams
  Ensure effective oversight by a principal investigator who values all evaluation components

  Develop good communication systems to minimise duplication and conflict between process and outcomes evaluations

  Ensure that plans for integration of process and outcome data are agreed from the outset

Design and conduct

- Clearly describe the intervention and clarify causal assumptions (in relation to how it will be implemented, and the mechanisms through which it will produce change, in a specific context)
- Identify key uncertainties and systematically select the most important questions to address

  Identify potential questions by considering the assumptions represented by the intervention

  Agree scientific and policy priority questions by considering the evidence for intervention assumptions and consulting the evaluation team and policy or practice stakeholders

  Identify previous process evaluations of similar interventions and consider whether it is appropriate to replicate aspects of them and build on their findings

- Select a combination of methods appropriate to the research questions:
  Use quantitative methods to measure key process variables and allow testing of pre-hypothesised mechanisms of impact and contextual moderators

  Use qualitative methods to capture emerging changes in implementation, experiences of the intervention and unanticipated or complex causal pathways, and to generate new theory

Balance collection of data on key process variables from all sites or participants with detailed data from smaller, purposively selected samples

Consider data collection at multiple time points to capture changes to the intervention over time

Analysis

- Provide descriptive quantitative information on fidelity, dose, and reach
- Consider more detailed modelling of variations between participants or sites in terms of factors such as fidelity or reach (eg, are there socioeconomic biases in who received the intervention?)
- Integrate quantitative process data into outcomes datasets to examine whether effects differ by implementation or prespecified contextual moderators, and test hypothesised mediators
- Collect and analyse qualitative data iteratively so that themes that emerge in early interviews can be explored in later ones
- Ensure that quantitative and qualitative analyses build upon one another (eg, qualitative data used to explain quantitative findings or quantitative data used to test hypotheses generated by qualitative data)
- Where possible, initially analyse and report process data before trial outcomes are known to avoid biased interpretation
- Transparently report whether process data are being used to generate hypotheses (analysis blind to trial outcomes), or for post-hoc explanation (analysis after trial outcomes are known)

Reporting

- Identify existing reporting guidance specific to the methods adopted
- Report the logic model or intervention theory and clarify how it was used to guide selection of research questions and methods
- Disseminate findings to policy and practice stakeholders
- If multiple journal articles are published from the same process evaluation ensure that each article makes clear its context within the evaluation as a whole:

  Publish a full report comprising all evaluation components or a protocol paper describing the whole evaluation, to which reference should be made in all articles

  Emphasise contributions to intervention theory or methods development to enhance interest to a readership beyond the specific intervention in question

Moore et al., 2015 (p – 4)

APPENDIX – 3

Advert for Patient and Public Involvement

CALLING ALL NEW DADS

Have you recently become a father for the first time?

Would you like to influence services and policies to support new first-time fathers?

We are carrying out a project, looking at men's experiences of becoming a father for the first time. This will enable better understanding of fathers' needs during this life changing time to influence services and policies aimed at dads.

If you are about to become a father or became a father for the first time in the last year, then we would like to invite you to act as an adviser for this important study.

You would be working with other new fathers from your local area and a research team from King's College London to form an advisory forum (Fathers' Forum), which will meet eight times over the next four years. Each meeting is likely to last no more than three hours. You do not need any previous experience, just a willingness to attend meetings and to offer your perspectives as someone who had become a father for the first time. You may also be asked to provide feedback on documents relating to the study.

As a recognition and appreciation of your commitment and time, you will be offered up to £75 worth of gift vouchers for each meeting you attend. In addition to this all travel and out-of-pocket expenses will be reimbursed for each meeting attended, including childcare costs, if applicable.

The first meeting will take place on 22nd July 2016 at 10am. If you are interested in finding out more, please contact Sharin Baldwin on 07956581635 or via email: sharin.1.baldwin@kcl.ac.uk

APPENDIX - 4

Role description for members of the Fathers' Forum (PPI Group)

Role Description:

Members of the Fathers' Forum will be asked to advise the King's College London research team on an NIHR funded study of support for first-time father's mental health and well-being

Members of the Forum will be asked to attend meetings with the research team from King's College London and offer their perspectives on becoming a father for the first time which could help the development of the study and how findings are used. Contributions from the Forum members will include ongoing advice to help the overall aims of the research study to be met and to support the research team to address the most important issues for new fathers. The active involvement of fathers will enhance the quality of the whole research process and add to the success of the study.

Background

We are undertaking a study to consider how best to support men as they become fathers for the first time, with a particular focus on how we can better support their mental health and wellbeing.

About the study:

- This study is being led by King's College London as part of a Clinical Doctorate Fellowship Programme funded by the National Institute for Health Research
- The Forum is being set up to ensure first-time fathers' views and experiences are considered throughout the study and help the development of father-inclusive and acceptable ways to support their mental health and well-being.

- The main areas likely to be discussed and decided at each Forum meeting could include for example: content of information offered to new fathers asked to participate in the study; how best to identify and ask new fathers if they would like to take part in the study; how best to support new fathers to complete all of the study stages; helping to understand implications of the study findings and how best to ensure other new fathers hear about our work; including research papers and presentations.

Meetings will be held at a venue in North West London with easy access and childcare facilities if needed.

The Fathers' Forum will include 4 or 5 first-time fathers all from the North-West London area and meetings will be chaired by the lead researcher, Sharin Baldwin (Clinical Doctoral Fellow at King's College London, and Health Visitor at London North West NHS Healthcare Trust).

The duration of the whole study is 1st April 2016 – 31st March 2020.

Matters for consideration by Fathers' Forum member:

Conflicts of interest: You will be asked to disclose any involvement you may have with other organisations, government bodies or corporate/commercial interests which could result in a conflict of interest with this project.

Confidentiality: You will be asked not to share any confidential information you may have heard during the Forum meetings about the project or information volunteered by someone else attending the meeting. If you have any concerns, this should be discussed with the lead researcher, Sharin Baldwin.

Possible roles of a Fathers' Forum member:

- To attend meetings held in a community setting in North West London. Members will be informed of the date, time and location in advance. At each meeting of the Forum, a convenient date and time for the next meeting will be arranged. Eight meetings are currently being planned throughout the duration of the study, each meeting lasting no more than 3 hours.
- To be available to comment on documents and reports via email or telephone if unable to attend in person.
- To contribute to discussion within the Fathers' Forum advisory group.
- To contribute to activities relating to this research project.

We would like to encourage interest in joining our Forum from:

- First-time fathers who have a child aged under 12 months
- Be able to maintain confidentiality
- Have the time to attend meetings (preferably face-to-face or via telephone)

Payment for your time and contribution

Fathers' Forum members on this project will be offered up to £75 gift vouchers for attending each meeting (£25 per hour) in recognition of their involvement and time. Refreshments will be provided at each meeting. If you are the main carer for your child and need to arrange child care to attend meetings, then this cost will be covered. Please discuss your specific needs with the lead researcher, Sharin Baldwin.

Support

Fathers' Forum members are able to access support and advice from the lead researcher (Sharin Baldwin) and other members of the research team via email, telephone or in person.

For further details about this project please contact:

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APPENDIX - 5

NEW DAD STUDY (NEST)

Participant Information Sheet (PIS) for Fathers in Study Phase 2

Study title: New Dad Study (NEST)

Invitation: We would like to invite you to take part in this research study. Joining the study is entirely up to you, but before you decide I would like you to understand why the research is being done and what it would involve for you. I will go through this information sheet with you, to help you decide whether or not you would like to take part and answer any questions you may have. This will take about 5-10 minutes. Please feel free to talk to others about the study if you wish.

The first part of the Participant Information Sheet tells you the purpose of the study and what will happen to you if you take part. Then we give you more detailed information about the conduct of the study. Do ask if anything is unclear.

What is this study about: We are undertaking a study to consider how best to support men as they become fathers for the first time, and how we can better support their mental health and wellbeing. Currently little is known about fathers' experiences during their transition to fatherhood and their mental health and wellbeing needs. Findings from this study will help shape services to meet the needs of fathers during this period.

You would be eligible to take part if you are a first-time father with a child under one year of age. This study will take part in the five London boroughs – Lambeth, Southwark, Ealing, Brent and Harrow. This study is part of a Clinical Doctorate Fellowship Programme funded by the National Institute for Health Research and hosted by King's College London.

More details about the study

Background and purpose

Becoming a father for the first time can be exciting, but some men may feel anxious or worried about their new role. Fathers' needs remain poorly understood and they may not be offered the right level of support by healthcare professionals. This study aims to gain a better understanding of first-time fathers' needs with a particular focus on their mental health and wellbeing so that we can understand how new fathers in the future can be better supported by health and other support services. Better support for new fathers may also have a positive impact on the health of their families. .

Your participation will provide valuable information to help us to better understand new fathers' needs.

What would taking part involve?

If you agree to take part you will be invited to an interview with the researcher, which will last around 45-90 minutes and take place at a time and location of your choice, including over the telephone or in your home or local children's centre. With your permission, the interview would be audio-recorded.

During this interview you will be asked to talk about your experiences of becoming a father for the first time and what support you would have liked. None of your personal details will be used after completing the interview, all information will be kept totally confidential, you will remain anonymous and no identifiable information will be published. Data collected during the study will be stored electronically on secured devices that are password protected. The audio recording will be transcribed using 'Alphabet Transcription Specialists' and we have a confidentiality agreement with them in place. Audio recording of your interview will be deleted once it has been analysed. The paper records (such as consent forms) will be stored in locked cabinets in a locked room at the researcher's place of work. Data and all appropriate documentation will be stored for a minimum of 5 years after the completion of the study as per King's College London Guidance.

You are under no obligation to take part in this study, and refusal to do so will not affect your or your partner's healthcare in any way. Your participation is totally voluntary and you are free to withdraw from the study at any time. If you withdraw from the study, we will destroy all your identifiable data, but we will need to use the data collected up to your withdrawal.

What are the possible benefits of taking part?

By taking part in this study you will be contributing to the knowledge and understanding of first-time fathers' experiences and needs in relation to their mental health and wellbeing.

What are the possible disadvantages and risks of taking part?

During the interviews while describing the experiences of the transition to fatherhood, and the challenges this brings, it is possible that some fathers may become upset or describe worries about their feelings. In such cases, details of local support services will be provided. Some individuals may reveal facts about their own health or relationships which may need to be referred on. These may include issues relating to individual mental health, safeguarding children or couple relationships. In such cases, as a health visitor, I will make the necessary referrals to appropriate services. This will only take place if there are any significant risks of harm to an individual.

Have patients and public been involved in this study?

We have worked with a group of local fathers who have supported this study and helped to develop the research questions. They will continue to advise this study.

What if there is a problem?

If you have any questions about this study, please ask to speak to me (Sharin Baldwin) and I will do my best to answer your questions. You can also contact the Chief Investigator (Debra Bick), see details below. If you remain unhappy and wish to complain formally, you can do this through the Guy's and St Thomas' Patients Advice and Liaison Service (PALS) on 020 7188 8801, pals@gstt.nhs.uk. The PALS team are based in the main entrance on the ground floor at St Thomas' Hospital and on the ground floor at Guy's Hospital in the Tower Wing.

In the event that something does go wrong and you are harmed during the research you may have grounds for legal action for compensation against Guy's and St Thomas' NHS Foundation Trust and/or King's College London but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you.

Who has reviewed this study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study was reviewed and given favourable opinion by London - Fulham Research Ethics Committee.

Thank You

In appreciation of your contributions and your time, we would like to offer you a £25 gift voucher.

For further details about this project please visit our website: www.newdadstudy.com or contact:

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Sharin Baldwin is funded by a National Institute for Health Research (NIHR) Clinical Doctoral Fellowship, ICA-CDRF-2015-01-031.

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National Institute for Health Research

APPENDIX - 6

NEW DAD STUDY (NEST)

Participant Information Sheet (PIS) for Fathers in Study Phase 3

Study title: New Dad Study (NEST)

Invitation: We would like to invite you to take part in this research study. Joining the study is entirely up to you, but before you decide I would like you to understand why the research is being done and what it would involve for you. I will go through this information sheet with you, to help you decide whether or not you would like to take part and answer any questions you may have. This will take about 5 - 10 minutes. Please feel free to talk to others about the study if you wish.

The first part of the Participant Information Sheet tells you the purpose of the study and what will happen to you if you take part. Then we give you more detailed information about the conduct of the study. Do ask if anything is unclear.

What is this study about: We are undertaking a study to consider how best to support men as they become fathers for the first time, and how we can better support their mental health and wellbeing.

Every family in England who has a child under the age of 5 years will be in receipt of visits from a health visitor. We are looking to better understand how they use a particular resource known at the Promotional Guide System to support men as they become fathers for the first time.

You would be eligible to take part if you are expecting to become a father for the first time and there is at least 3 months until your baby's expected date of birth. This study will take part in the five London boroughs – Lambeth, Southwark, Ealing, Brent and Harrow. This study is being led by King's College London as part of a Clinical Doctorate Fellowship Programme funded by the National Institute for

Health Research and the duration of the whole project is 1st April 2016 – 31st March 2020.

More details about the study

Background and purpose

Becoming a father for the first time can be exciting, but some men may feel anxious or worried about their new role. Becoming a parent for the first time may result in a number of lifestyle changes. While the importance of mothers' needs during this period is more widely recognised, fathers' needs remain poorly understood and as a result fathers may not be offered the right support by healthcare professionals. We are looking to explore views and experiences of local services offered to new fathers by health visitors, as well as well as experiences and views of fathers who opt out of these services. If fathers are better supported it also has a positive impact on their child and the mother, contributing to better public health.

In total there will be up to 50 fathers taking part in completing the study questionnaires and a further 15-20 from this group will be interviewed so that we can gain a better understanding of their experiences. Your participation will provide valuable information to us better understanding men's needs as fathers, which can be used to redesign health services for fathers.

What would taking part involve?

It will involve you completing two questionnaires either online or via post using a pre-paid envelope that will be provided (one in the antenatal period and one in the postnatal period). The questionnaires will include questions about your health and wellbeing, relationship with your partner, and the health services that you may have received. You will be asked to complete the antenatal questionnaire before the routine health visitor contact around 8-12 weeks before your baby is due and the postnatal questionnaire around 3 months after the birth of your baby. Reminders to complete the second and third questionnaire will be offered in the form of an email or text message by the principal investigator.

In addition to this, you may be asked by the Principle Investigator to take part in either a one-off interview, or an observation of your Promotional Guide visit with a health visitor.

If you take part in the interview, you will be asked about your views and experiences of health services received. The interview can be carried out over telephone or face-to-face and will be audio-recorded. It is likely to last between 45 - 60 minutes, and will be arranged at a time to suit you.

If you take part in the observation it will take place during the antenatal or postnatal promotional guide contact that your health visitor carries out. During the observation you will not be required to do anything. It is the health visitor who will be observed and detailed notes will be taken on the information given by the health visitor. You will however be required to give consent before this observation can take place.

Your name or personal details will not be recorded during this interview or observation, and therefore you will remain anonymous. Demographic data (such as age, ethnicity etc) will be collected for the study and all information will be kept confidential. Any identifiable information will be removed from any publications or presentations about the study. Data collected during the study will stored electronically on secured devices that are password protected. The audio recording will be transcribed using 'Alphabet Transcription Specialists' and we have a confidentiality agreement with them in place. Audio recording of your interview will be deleted once it has been analysed. The paper records (such as consent forms) will be stored in locked cabinets in a locked room at the researcher's place of work. Data and all appropriate documentation will be stored for a minimum of 5 years after the completion of the study as per King's College London Guidance.

You are under no obligation to take part in this study, and refusal to do so will not affect you in any way. Your participation will be totally voluntary and you are free to withdraw from the study at any time. If you withdraw from the study, we will destroy all your identifiable data, but we will need to use the data collected up to your withdrawal.

What are the possible benefits of taking part?

By taking part in this study you will be contributing to the knowledge and understanding of how to better support men as they become fathers for the first-time. It will inform future studies aimed at improving services and support for new fathers in the UK.

What are the possible disadvantages and risks of taking part?

In completing the questionnaires about feelings and thoughts it is possible that some fathers may have concerns about their own health and wellbeing. The questionnaires will suggest that fathers with any concerns contact their GP or NHS 111. Useful links for more information that may help, will be provided at the end of the questionnaires.

During the interviews while describing the experiences of the transition to fatherhood, and the challenges this brings, it is possible that some fathers may become upset or describe worries about their feelings. In such cases, details of local support services will be provided. Some individuals may reveal facts about their own health or relationships which may need to be referred on. These may include issues relating to individual mental health, safeguarding children or couple relationships. In such cases, as a health visitor, I will make the necessary referrals to appropriate services. This will only take place if there are any significant risks of harm to an individual.

What if there is a problem?

If you have any questions about this study, please ask to speak to me (Sharin Baldwin) and I will do my best to answer your questions. You can also contact the Chief Investigator (Debra Bick), see details below. If you remain unhappy and wish to complain formally, you can do this through the Guy's and St Thomas' Patients Advice and Liaison Service (PALS) on 020 7188 8801, pals@gstt.nhs.uk. The PALS team are based in the main entrance on the ground floor at St Thomas' Hospital and on the ground floor at Guy's Hospital in the Tower Wing.

In the event that something does go wrong and you are harmed during the research you may have grounds for legal action for compensation against Guy's and St Thomas' NHS Foundation Trust and/or King's College London but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you.

Have patients and public been involved in this study?

We have worked with local fathers who have helped to develop the research questions. A fathers' forum consisting of 5 new fathers has been set up to continue to advise this study. In designing this study, we have taken into account fathers opinions from this forum and they were involved in reviewing the Participant Information Sheet and consent form.

Who has reviewed this study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study was reviewed and given favourable opinion by London - Fulham Research Ethics Committee.

Thank you

In appreciation of your contributions and your time, we would like to offer you a £25 gift voucher.

For further details about this project please contact:

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Sharin Baldwin is funded by a National Institute for Health Research (NIHR) Clinical Doctoral Fellowship, ICA-CDRF-2015-01-031.

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National Institute for Health Research

APPENDIX - 7

NEW DAD STUDY (NEST)

Participant Information Sheet (PIS) for Health Visitors in Study Phase 3

Study title: New Dad Study (NEST)

Invitation: We would like to invite you to take part in this research study. Joining the study is entirely up to you, before you decide I would like you to understand why the research is being done and what it would involve for you. I will go through this information sheet with you, to help you decide whether or not you would like to take part and answer any questions you may have. This will take about 10 minutes. Please feel free to talk to others about the study if you wish.

The first part of the Participant Information Sheet tells you the purpose of the study and what will happen to you if you take part. Then we give you more detailed information about the conduct of the study. Do ask if anything is unclear.

Brief summary: We are undertaking a study to consider how best to support men as they become fathers for the first time, with a particular focus on how we can better support their mental health and wellbeing. We will be testing the feasibility and acceptability of the Promotional Guide System on fathers, and as part of this, we would like to find out about your views of this intervention. Findings from this study will help shape services to meet the needs of fathers during this period.

You would be eligible to take part if you are a qualified health visitor, trained to use the Antenatal and Postnatal Promotional Guides and have experience of using them with fathers in practice. This study will take part in the boroughs served by London North West Healthcare Trust and Guy's & St. Thomas' NHS Foundation Trust. This study is being led by King's College London as part of a Clinical Doctorate Fellowship Programme funded by the National Institute for Health Research and the duration of the whole project is 1st April 2016 – 31st March 2020.

More details about the study

Background and purpose

Men go through a number of complex changes when they become fathers, making the transition to fatherhood a particularly meaningful and exciting as well as a potentially vulnerable time in a man's life. The transition to parenthood brings about a number of changes and challenges for both parents - mothers and fathers. While the importance of mothers' needs during this period is widely recognised, fathers' needs remain comparatively poorly understood and as a consequence, are likely to be unmet. This study aims to gain a better understanding of fathers' needs during this period relating to their mental health and wellbeing so that they can be better supported through more appropriate services and support systems. If fathers are better supported it also has a positive impact on their child and the mother, contributing to better public health. As part of this study, an intervention known as the 'Promotional Guides System' will be implemented and its acceptability and feasibility will be tested. The national Healthy Child programme (HCP) (DH, 2009) recommends the use of promotional guides with parents antenatally and postnatally, which have been reported to be effective when used by health visitors in identifying parental needs (Davis et al, 2005). These guides include questions based around five core themes:

- Health, wellbeing and development of baby, mother and father
- Couple relationship
- Family and social support
- Parent-infant care and interaction
- Developmental tasks of early parenthood and infancy

The antenatal promotional guide is used around 4 to 6 weeks before the baby is due, and the postnatal guide around 6-8 weeks after the birth of the baby. In total there will be up to 25 health visitors interviewed so that we can gain a better understanding of their experiences of using the Promotional Guides. Your participation will provide valuable information to better understand whether this intervention is suitable to be used with fathers in its current form and acceptable to them, as well to the professionals delivering it.

What would taking part involve?

It will involve taking part in either a one-off interview, or an observation of your Promotional Guide visit in practice.

The interview can be carried out over telephone or face-to-face and will be audio-recorded. It is likely to last between 45 -60 minutes, and will be arranged at a time to suit you.

The observation will be of one antenatal or postnatal promotional guide contact that you carry out with parents. During the observation detailed notes will be taken, and you will be asked to obtain consent from the parents for the researcher to be present prior to the visit. An information sheet will be available to explain the study to the parents.

Your name or personal details will not be recorded during this interview or observation, and therefore you will remain anonymous. Demographic data (such as age, ethnicity etc) will be collected for the study and all information will be kept confidential. Any identifiable information will be removed from any publications or presentations about the study. Data collected during the study will stored electronically on secured devices that are password protected. The audio recording will be transcribed using 'Alphabet Transcription Specialists' and we have a confidentiality agreement with them in place. Audio recording of your interview will be deleted once it has been analysed. The paper records (such as consent forms) will be stored in locked cabinets in a locked room at the researcher's place of work. Data and all appropriate documentation will be stored for a minimum of 5 years after the completion of the study as per King's College London Guidance.
You are under no obligation to take part in this study, and refusal to do so will not affect you in any way. Your participation will be totally voluntary and you are free to withdraw from the study at any time. If you withdraw from the study, we will destroy all your identifiable data, but we will need to use the data collected up to your withdrawal.

What are the possible benefits of taking part?

By taking part in this study you will be contributing to the knowledge and understanding of this intervention aimed at improving first-time fathers' experiences and needs in relation to mental health and wellbeing.

What are the possible disadvantages and risks of taking part?

There are unlikely to be any risks to you if you decide to take part. During the interviews while describing the experience of using the Promotional Guides, it is possible that additional training needs may be identified by some health visitors. In such cases, they will be advised to discuss these needs with their line manager. In the unlikely event that any practice issues are raised, then the health visitor's line manager will be notified of this by the chief investigator. This will only take place if there are any significant risks related to the individual's professional practice.

If you have a concern about any aspect of this study, you should ask to speak to the chief investigator who will do their best to answer your questions (Sharin Baldwin, contact number). If you remain unhappy and wish to complain formally, you can do this by contacting the researcher's supervisor, Debra Bick on details below.

Have patients and public been involved in this study?

A group of local fathers have helped develop the research topic and the research questions. A fathers' forum consisting of five new fathers has been set up who will continue to advise this study as it progresses. In designing and developing this study, we have taken fathers' views into account and the forum were involved in reviewing the Participant Information Sheet and consent form. We have also consulted local health visitors on the development of the study protocol.

Who has reviewed this study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by XXX Research Ethics Committee.

Thank you

In recognition of your contribution and your time, we would like to offer you a £25 gift voucher.

For further details about this project please contact:

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T: 0207 848 3641

Sharin Baldwin is funded by a National Institute for Health Research (NIHR) Clinical Doctoral Fellowship, ICA-CDRF-2015-01-031.

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APPENDIX - 8

NEW DAD STUDY (NEST)

Consent Form for First-Time Fathers (Study Phase 2)

Rec Reference Number: 17/LO/0815

Title of Project: New Dad Study (NEST)

Name of Researcher taking consent: Sharin Baldwin

Please initial box

1. I confirm that I have read the information sheet dated 05/06/17 (version -3) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐
3. I understand that the interview will be audio- recorded. ☐
4. I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. ☐
5. I agree to take part in the above study. ☐

_____	_____	_____
Name of Participant	Date	Signature
_____	_____	_____
Name of Person taking consent	Date	Signature

When completed: 1 for participant; 1 for researcher site file.

APPENDIX - 9

NEW DAD STUDY (NEST)

Consent Form for First-Time Fathers – interviews (Study Phase 3)

Title of Project: New Dad Study (NEST)

Name of Researcher taking consent: Sharin Baldwin

Please initial box

1. I confirm that I have read the information sheet dated 05/06/18 (version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐
3. I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. ☐
4. I understand that the interview will be audio- recorded. ☐
5. I agree to take part in the above study. ☐

Name of Participant	Date	Signature
Name of Person taking consent	Date	Signature

When completed: 1 for participant; 1 for researcher site file.

APPENDIX - 10

NEW DAD STUDY (NEST)

Consent Form for Health Visitors – interviews (Study Phase 3)

Title of Project: New Dad Study (NEST)

Name of Researcher taking consent: Sharin Baldwin

Please initial box

1. I confirm that I have read the information sheet dated 05 06 17 (version 2) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐
3. I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. ☐
4. I understand that the interview will be audio- recorded. ☐
5. I agree to take part in the above study. ☐

Name of Participant	Date	Signature
Name of Person taking consent	Date	Signature

When completed: 1 for participant; 1 for researcher site file.

APPENDIX - 11

NEW DAD STUDY (NEST)

Consent Form for Fathers – Observation (Study Phase 3)

Title of Project: New Dad Study (NEST)

Name of Researcher taking consent: Sharin Baldwin

Please initial box

1. I confirm that I have read the information sheet dated 05 06 17 (version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐
3. I understand that during this visit I will not be required to do anything. It is the health visitor who will be observed and detailed notes will be taken on the information given to me by the health visitor. ☐
4. I understand that the information collected during this visit will be used to support other research in the future, and may be shared anonymously with other researchers. ☐
5. I agree to take part in the above study. ☐

Name of Participant	Date	Signature
Name of Person taking consent	Date	Signature

When completed: 1 for participant; 1 for researcher site file.

APPENDIX - 12

Service Level Agreement for Transcription Service

SERVICE LEVEL AGREEMENT

THIS SERVICE LEVEL AGREEMENT ("Agreement") is made the 23 day of **March** 2016 by and between

(1) GUY'S AND ST THOMAS'S NHS FOUNDATION TRUST of Guy's Hospital, Great Maze Pond, London SE1 9RT (hereinafter referred to as "Hospital"); and **KINGS COLLEGE LONDON** of Strand, London WC2R 2LS (hereinafter referred to as the College"). Which are collectively referred to as the "Parties" or individually referred to as a "Party". Hospital and the College together hereinafter also referred to as the "Co-Sponsors".

(2) Alphabet Transcription Specialists (hereinafter referred to as the "Service Provider") which are also referred to individually herein as a 'Party' or collectively as the 'Parties'.

1. BACKGROUND

1.1.1 **Sharin Baldwin** and an employee of King's College London, has designed the research study entitled "**New Dad Study: Testing the feasibility and acceptability of an intervention to improve first-time fathers' transition to fatherhood focusing on the role of mental health and wellbeing"** ("the Trial"). A copy of the Trial protocol is attached hereto as Appendix 1 (the "Protocol").

1.2 GUY'S AND ST THOMAS'S NHS FOUNDATION TRUST **of Guy's Hospital, Great Maze Pond, London SE1 9RT (hereinafter referred to as "Hospital"); and** KINGS COLLEGE LONDON **are** leading the Trial and have agreed to take on the role of Co-Co-sponsors in accordance with the Research Governance Framework for Health and Social Care, Second Edition, April 2005 and The Medicines for Human Use (Clinical Trials) Regulations 2004 and any subsequent amendments.

1.3 The Co-sponsors wish to engage the Service Provider to undertake specific activities related to the Trial (the "Work") as detailed in Appendix 2 and throughout this Agreement in accordance with the requirements of the Protocol (and any amendments thereto).

1.4 The Service Provider is willing to undertake the Work.

1.5 Service Provider intends to appoint Barbara Brewster, an employee of the Service Provider (the "Lead Contact") to carry out the Work in the Administration Department (the study is being carried out in the Faculty of Nursing and Midwifery, KCL).

1.6 No Investigative Medical Products "IMPs" will be investigated in the Trial.

IT IS HEREBY AGREED AS FOLLOWS:

2. INTERPRETATION

2.1 With respect to the Work, the Service Provider undertakes to satisfy the requirements of the Protocol as may be amended from time to time and to discharge its duties hereunder in such a way that the Co-Sponsors are fully able to fulfil their obligations in accordance with the Protocol.

2.2 This Agreement will commence on the date of the last signature received (the "Effective Date") and will continue in full force and effect until completion of the Work or earlier termination in accordance with Clause 8 hereunder (the "Effective Period"). Any variation to the terms of this Agreement shall be subject to the prior written

consent of the Parties.

3. SERVICES

3.1 The Work shall comprise the activities and deliverables specified in Appendix 2 of this Service Level Agreement as agreed between the Parties. The Co-Sponsors will supply (or arrange to supply) the Service Provider with all such information, documentation and other materials which might reasonably be required by the Service Provider for its performance of the Work. In addition, the Co-Sponsors shall give the Service Provider further, detailed information regarding any change in requirements regarding the Work.

3.2 Service Provider undertakes to carry out the Work on the terms set out herein and to complete the Work within the Effective Period of this Agreement.

3.3 Service Provider shall use all reasonable endeavours to perform the Work on the terms set out herein and in a timely manner.

3.4 In accordance with the Protocol, the Co-Sponsors shall procure that clinical samples are sent to the Service Provider in accordance with the terms and conditions relating to the transfer of biological samples at Appendix 3. These clinical samples may include but are not limited to human cells, serum, DNA and RNA ("Clinical Samples").

3.5 The Service Provider shall process, handle, use and store the Clinical Samples in accordance with the terms of the Protocol (attached hereto as Appendix 1), the Human Tissue Act 2004 or Human Tissue (Scotland) Act 2006, as applicable, the patient information sheet and consent form as approved by a Research Ethics Committee and the documented informed consent of the patient. The Service Provider shall ensure that the Clinical Samples are handled and stored in accordance with applicable law.

3.7 Service Provider shall abide by the Human Tissue Act (2004) and the Data Protection Act (1998) and the Trial Protocol and shall be liable for any action brought against the Co-Sponsors in accordance with clause 7.3.

3.8 The Service Provider will use its reasonable endeavours to ensure that all the Service Provider staff receive such training and instructions as are appropriate for the performance of the Work and that such Work is carried out with due care and diligence. The Service Provider shall undertake the Work in collaboration with the Co-Sponsors in accordance with any applicable national and EU statutory and regulatory requirements which are relevant to the Work.

3.9 The Service Provider's contact for all scientific and technical matters regarding the Work shall be the Lead Contact Denise Elsdon, Telephone: 01707 260027, Mobile: 07932 672528, email: denise@alphabetsecretarial.co.uk or those nominated by him/her. The Co-sponsors contact for all scientific and technical matters regarding the Work shall be Sharin Baldwin, Telephone: 07956 581635, email: sharin.baldwin@kcl.ac.uk or those nominated by her.

3.10 If the Co-Sponsors believe that the Work, or the way in which the Service Provider is undertaking the Work, is deficient, they shall formally notify the Service Provider in writing at the earliest opportunity, discuss the matter with the Service Provider, and then give the Service Provider clear written details as to how the Work have not been satisfactory. If the Service Provider agrees that the Work have been unsatisfactory,

the Service Provider shall remedy any such deficiencies within an agreed, reasonable time, not generally to exceed twenty-one (21) working days.

3.11 Should the Service Provider not remedy the above faults within a period agreed with the Co-Sponsors, the Co-Sponsors shall be entitled to terminate this Agreement forthwith in accordance with Clause 8.2 below. Should the Service Provider not agree with the Co-sponsors account of deficiencies in the Work or should the Service Provider not feel that the Work undertaken were deficient or that the Co-Sponsors are unfair in their assessment of the deficiencies in the Work, and the Parties are unable to resolve the matter amicably between themselves, the matter shall be resolved by the mechanism described under sub-clause 10.9.

3.12 Service Provider shall ensure that the Lead Contact and his team are properly qualified, trained and skilled to undertake the Work required for the Trial.

3.13 Service Provider shall permit, and shall procure that the Lead Contact shall permit, Trial-related monitoring, audits and regulatory inspections (where appropriate) by the Co-sponsors and/or regulatory authorities by providing the Co-sponsors and/or regulatory authorities with direct access to all Trial-related documentation, including without limitation, staff delegation logs.

3.14 Service Provider shall assist the Co-sponsors with any audits or monitoring when reasonably requested.

3.15 Reserved

4. ACCESS TO CLINICAL SAMPLES

The Service Provider shall only allow access to the Clinical Samples to the Co-Sponsors or any third party (the "Accessing Party") to carry out further research work provided that such Accessing Party first enters into an enforceable written agreement with the Co-Sponsors.

5. CONFIDENTIALITY

5.1 The Service Provider shall keep all the results of the Work confidential and shall not disclose such results to third parties without the express written permission of the Co-Sponsors, unless and until the results of the Trial have lawfully entered the public domain.

5.2 The Parties shall ensure that information received from another Party relating to the Work or the results of the Trial are exchanged on a confidential basis. In the event of one Party making available to another Party ('the Receiving Party') its background confidential information or confidential information relating to its business, scientific or other activities in the course of the Work ('Confidential Information'), the Party receiving such Confidential Information shall maintain its secrecy, shall use it only for the purpose for which it is disclosed and shall not disclose it to third parties, its directors, members of its staff or students outside the research team working on the Work, or include it in the results or report of the Work without the prior written permission of the Party disclosing it. If any Party intends to use the services of sub-contractors, consultants, agents or students to undertake, manage or advise on the Work, that Party shall first ensure that such sub-contractors, consultants, agents or students sign legally-binding agreements undertaking to abide by the same conditions of confidentiality as are set out in this Agreement. The Service Provider

shall ensure that the medical confidentiality of all data relating to the Trial is fully maintained.

5.3 The obligations in clause 5.2 shall not apply to data or information which the Receiving Party can clearly demonstrate:-

(i) was known to it prior to disclosure; or

(ii) was or becomes legitimately in the public domain through no fault of itself; or

(iii) becomes available to it from an unconnected third party with the lawful right to make such a disclosure; or

(iv) has been independently developed or conceived by it; or

(v) it is required to disclose by law or a regulatory body, in which circumstances the Receiving Party shall wherever practicable give reasonable advance notice of the intended disclosure to the other Party, and the relaxation of the obligations of confidentiality shall apply only for as long as is necessary to comply with the relevant law or regulatory requirement and solely for the purposes of such compliance.

5.4 The obligations of confidentiality herein shall survive expiry or termination of this Agreement by five (5) years.

6. INTELLECTUAL PROPERTY RIGHTS

6.1 Nothing in this Service Level Agreement shall affect the ownership of intellectual property rights existing prior to this Service Level Agreement or generated outside the Work which one Party agrees to make available to the others in the course of the Work or the Trial ("Background IP"). To the extent to which it is free to do so, each Party shall make available to the others any Background IP which is necessary for the undertaking of the Work and the Trial.

6.2 The results of the Work including any intellectual property rights and commercially valuable know-how deriving from the Work (including from the use of the Clinical Samples) ("Arising IP") shall be the property of the Co-sponsors who shall be free to use them as it sees fit or is required to.

6.3 Neither of the Parties makes any representation or gives any warranty to the other that any advice or information given by it or any of its employees or students who conduct the Work, or the content or use of any Arising IP, Background IP or materials, works or information provided in connection with the Work, will not constitute or result in any infringement of third-party rights.

6.4 The Co-sponsors shall grant to Service Provider a non-exclusive, royalty-free licence to use any Arising IP associated with the Work provided for its own internal organisational, academic, non-commercial, research or evaluation purposes, or patient care, subject to the obligations of confidentiality established in this Agreement.

7. LIABILITY AND INDEMNITIES

7.1 No Party shall hold another Party liable for any damages, dispute or injury arising under this Agreement unless caused by a wilful act, negligence or default of that Party, its employees, students, directors, representatives, consultants or agents. Nor shall one Party be liable to another Party for any indirect or consequential loss, damages, claims or demands arising out of this Agreement or the Work, including without limitation any economic loss or other loss of income, profits, business, opportunity or goodwill no matter how arising, whether by breach or by negligence and whether in contract, tort or otherwise.

7.2 **King's College London** shall maintain at its own cost an insurance policy to cover its potential liability in respect of any act, omission or default for which it and its employees, directors, representatives, consultants or agents may become liable under this Agreement.

GSTFT maintains that it will continue to be a member of the Clinical Negligence Scheme for Trusts as administered by the NHS Litigation Authority which provides cover in relation to clinical negligence.

Service Provider shall maintain at its own cost an insurance policy to cover its full liability in respect of any negligent act, omission or default for which it and its employees, students, directors, representatives, consultants or agents may become liable under this Service Level Agreement.

7.3 For the avoidance of doubt, the Service Provider shall indemnify, defend and hold harmless the Co-Sponsors and their employees, students, directors, consultants, representatives and agents fully for any negligent act, omission or default for which the Service Provider may become liable under this Agreement including but not limited to liabilities arising from the actions of Trial subjects, their legal representatives or third parties as a result of the negligence of the Service Provider in providing the Work.

7.4 Nothing in this Agreement shall operate so as to restrict or exclude the liability of any of the Parties in relation to death or personal injury caused by the negligence of that Party, its servants, agents or employees or to restrict or exclude any other liability of any Party which cannot be so restricted or excluded in law.

7.5 Subject to clause 7.4 above, the liability of any Party to another arising out of or in connection with any breach of this Agreement, or negligence, gross negligence or wilful misconduct in connection with this Agreement, shall in no event exceed the value of this Agreement.

7.6 The Co-Sponsors make no representation and gives no warranty or undertaking in relation to the Clinical Samples whatsoever and excludes all implied warranties to the fullest extent permitted by law. In particular the Co-Sponsors make no representation or warranty as to title, quality or fitness for purpose of the Clinical Samples.

7.7 The Parties will not be jointly responsible for each others' actions and in particular it is agreed that the liability of the three Parties is several and not joint and no Party shall be liable for the acts or defaults of another.

8. TERMINATION

8.1 This Agreement may be terminated by one Party giving the other Party(ies) reasonable prior notice of not less than ninety (90) working days. In the event of such termination the Parties shall endeavour to resolve any outstanding issues between themselves in an amicable manner. Further, the Service Provider acknowledges that this Agreement shall be terminated forthwith should the Trial funding be terminated.

8.2 Additionally, the Co-Sponsors may terminate this Agreement forthwith as provided for under clause 3.11, and any Party may terminate this Agreement by giving notice in writing to that effect to the other Party if:

(i) any other Party is in material breach of its duties and obligations hereunder and

has not remedied such breach within thirty (30) working days of receiving notice from a Party not in breach; or

(ii) any other Party enters into bankruptcy or liquidation, has a receiver, liquidator or administrator appointed over the whole or any part of its assets, becomes insolvent or is otherwise unable to pay its debts as they fall due (with the exception of liquidation for the specific purpose of an amalgamation, reconstruction or other reorganisation such that the body resulting from the reorganisation agrees to be bound by and to assume the obligations imposed on amalgamating Party herein *mutatis mutandis*);

In such circumstances, the Party in receipt of notice of termination shall cease to use, and shall promptly return, all technical and scientific information (including Confidential Information and Background IP) supplied to it hereunder in connection with the Work by the other Parties, together with all copies thereof in its possession, or provided to any third party for the purpose of this Agreement. The rights, benefits and licences granted or agreed to be granted hereunder to the Party in receipt of such notice shall automatically be deemed terminated or cease forthwith upon such termination and any rights assigned or agreed to be assigned shall automatically be reassigned to the Party which originally provided the Confidential Information or Background IP for the purpose of this Agreement.

9 NOTICES

9.1 Any notices under this Agreement by any Party to the other Party shall be made in writing and shall be sent by registered or recorded delivery or by hand to the other Party at the address stated in this Agreement as follows:

King's College London:
Director of Research Grants and Contracts
King's College London
F8, Capital House
42 Weston Street
London SE1 3QD

Service Provider:
Alphabet Transcription Specialists
22 Ground Lane
Hatfield
Hertfordshire
AL10 0HH
Telephone: +44 (0) 1707 260027
Mobile: 07932 672528
Website: www.alphabetsecretarial.co.uk

10. GENERAL PROVISIONS

10.1 No failure to exercise or delay in the exercise of any right or remedy which any Party may have under this Agreement shall operate as a waiver thereof, and nor shall any single or partial exercise of any such right or remedy prevent any further or other exercise thereof, or of any other such right or remedy.

10.2 The Service Provider shall ensure that in undertaking the Work, it complies fully with all applicable local, government and international laws, regulations and guidelines

which are effective during the period of this Agreement, including those governing health and safety, data protection and equal opportunities matters such as race and gender equality, disability, age, religion and sexual orientation as well as the use of human tissue and good clinical practice.

10.3 The Service Provider shall not assign this Agreement or any of its obligations or duties hereunder without the prior written consent of the Co-Sponsors.

10.4 The Service Provider's relationship with the Co-Sponsors is exclusively that of an independent contractor, and this Agreement is not intended to establish, and shall not be construed by any Party in the future as having established, any form of business partnership or agency between themselves or to have created the relationship of principal and agent, a membership or any other legal entity between the Parties, other than as specifically and expressly set out herein and accordingly no Party shall have any right or authority to act on behalf of another nor to bind another by contract or otherwise in connection with the Work.

10.5 This Agreement, including its Appendices, supersedes and terminates all other agreements, terms, understandings and representations , whether written, oral, express or implied, between the Parties about the Work and constitutes the entire agreement between the Parties concerning the Work and the sole basis on which they have entered into this Agreement. However, this clause shall not exclude a Party's liability for any fraudulent representation or concealment made prior to the execution of this Agreement.

10.6 Except as provided for herein, no Party shall use another Party's name, crest, logo, trademark or registered image, or the name of any of its staff or students for any purpose without the express written permission of that Party or individual, except that nothing in this clause shall restrict, delay, impede or prevent a Party from using another Party's name when making disclosures under the Freedom of Information Act 2000 (FOIA) or the Freedom of Information (Scotland) Act 2002 (FOI(S)A) or any subsequent re-enactment or modification thereof or in its own internal literature.

10.7 Except as otherwise expressly provided for herein, nothing in this Agreement shall confer or purport to confer on any third party any benefit or any right to enforce any term of this Agreement, and it shall not require the permission of any third party for it to be amended or terminated.

10.8 This Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective successors in title and assigns, and any amendments to this Agreement shall be agreed in writing by all Parties, their successors in title or their assigns.

10.9 In the event of any difference, dispute or question, arising from this Agreement, the Parties will endeavour to settle such matters amicably between themselves in good faith. Should they be unable to do so within a period of thirty (30) working days, the matter shall then be settled finally by referring it promptly to the 'Model Mediation Procedure' promoted by the Centre for Effective Dispute Resolution for resolution using Alternative Dispute Resolution techniques. Any decision reached in this way shall be final and binding upon the Parties.

10.10 The clause headings in this Agreement are for reference purposes only and shall not affect its meaning or interpretation.

10.11 Clauses 5 (Confidentiality), 6 (Intellectual Property Rights), 7 Liability and Indmenity and 10 (General) shall survive expiry or termination of this Agreement.

10.12 This Agreement is made and shall be interpreted in accordance with English Law the Parties shall submit to the jurisdiction of the English Courts

SIGNATURE PAGE FOLLOWS

AGREED by the Parties through their authorised signatories:

Signed for and on behalf of **SERVICE PROVIDER**

Signature: 

Date: 23rd March 2017

Name: Denise Elsdon

Position: Founder and Owner

Signed for and on behalf of **KING'S COLLEGE LONDON**

Signature..... Date 23/03/2017

Name Paul Labbett

Position Director of Research Grants & Contracts

Signed in acknowledgement by the Chief Investigator:

Signature... ..... Date.....23/3/17.....

Name... Debra Bick .....

Position.....

APPENDIX 1

PROTOCOL

Protocol title: New Dad Study: Testing the feasibility and acceptability of an intervention to improve first-time fathers' transition to fatherhood focusing on the role of mental health and wellbeing

Protocol version: 2.0

Protocol date: 23/02/17
And any amendments thererto.

Chief Investigator: Debra Bick, (Supervisor)
King's College London, Florence Nightingale School of Nursing and Midwifery
James Clerk Maxwell Building, 57 Waterloo Road, London SE1 8WA
Telephone: 0207 848 3641
Email: debra.bick@kcl.ac.uk

Co-sponsors: Guy's & St Thomas NHS Foundation Trust and King's College London

APPENDIX 2

DESCRIPTION OF WORK

The Service Provider shall undertake the following activity: To provide a transcription service for interviews conducted during a research project entitled: New Dad Study: Testing the feasibility and acceptability of an intervention to improve first-time fathers' transition to fatherhood focusing on the role of mental health and wellbeing.

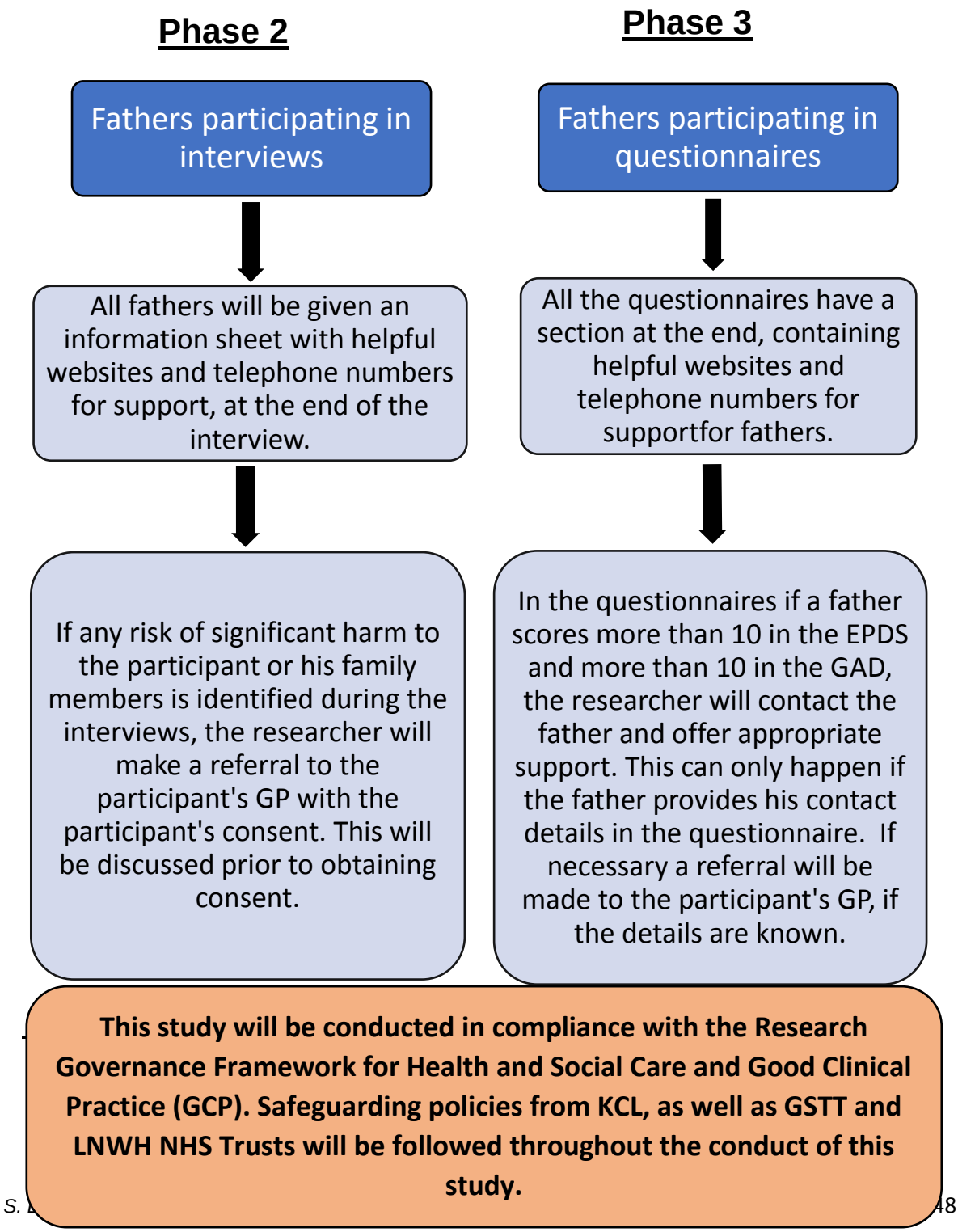
Details of interview transcriptions required:

- Up to 20 interviews, each lasting 45-90 minutes in Phase – 2
- Up to 30 interviews, each lasting 30-45 minutes in Phase – 3.

APPENDIX - 13

Protocol for referring fathers for additional support

The following steps will be followed to ensure fathers taking part in this study are adequately supported:



This study will be conducted in compliance with the Research Governance Framework for Health and Social Care and Good Clinical Practice (GCP). Safeguarding policies from KCL, as well as GSTT and LNWH NHS Trusts will be followed throughout the conduct of this study.

APPENDIX - 14

NHS
Health Research Authority

Sharin Baldwin
NIHR Clinical Doctoral Fellow
King's College London
Florence Nightingale Faculty of Nursing and Midwifery
James Clerk Maxwell Building
57 Waterloo Road
London
SE1 8WA

Email: hra.approval@nhs.net

27 June 2017

Dear Mrs Baldwin

Letter of HRA Approval

Study title:	**Testing the feasibility and acceptability of an intervention to improve first time fathers' transition to fatherhood focusing on the role of mental health and wellbeing**
IRAS project ID:	**203629**
REC reference:	**17/LO/0815**
Sponsor	**King's College London**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Further information on funding, HR processes, and compliance with HRA criteria and standards is also provided.

It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details and further information about working with the research management function for each organisation can be accessed from www.hra.nhs.uk/hra-approval.

Appendices

The HRA Approval letter contains the following appendices:

- A – List of documents reviewed during HRA assessment
- B – Summary of HRA assessment

After HRA Approval

The document *"After Ethical Review – guidance for sponsors and investigators"*, issued with your REC favourable opinion, gives detailed guidance on reporting expectations for studies, including:

- Registration of research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics, and is updated in the light of changes in reporting expectations or procedures.

In addition to the guidance in the above, please note the following:

- HRA Approval applies for the duration of your REC favourable opinion, unless otherwise notified in writing by the HRA.
- Substantial amendments should be submitted directly to the Research Ethics Committee, as detailed in the *After Ethical Review* document. Non-substantial amendments should be submitted for review by the HRA using the form provided on the HRA website, and emailed to hra.amendments@nhs.net.
- The HRA will categorise amendments (substantial and non-substantial) and issue confirmation of continued HRA Approval. Further details can be found on the HRA website.

Scope

HRA Approval provides an approval for research involving patients or staff in NHS organisations in England.

If your study involves NHS organisations in other countries in the UK, please contact the relevant national coordinating functions for support and advice. Further information can be found at http://www.hra.nhs.uk/resources/applying-for-reviews/nhs-hsc-rd-review/.

If there are participating non-NHS organisations, local agreement should be obtained in accordance with the procedures of the local participating non-NHS organisation.

IRAS project ID	203629

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/.

HRA Training

We are pleased to welcome researchers and research management staff at our training days – see details at http://www.hra.nhs.uk/hra-training/

Your IRAS project ID is **203629**. Please quote this on all correspondence.

Yours sincerely

Beverley Mashegede
Assessor

Email: hra.approval@nhs.net

Copy to: Mr Keith Brennan, Sponsor Contact

Mary Jawad, Lead NHS R&D Contact

Professor Debra Bick, Chief Investigator

Participating organisations (PICs);

- NHS LAMBETH CCG
- NHS SOUTHWARK CCG
- NHS HARROW CCG
- NHS EALING CCG
- NHS BRENT CCG

IRAS project ID	203629

Appendix A - List of Documents

The final document set assessed and approved by HRA Approval is listed below.

Document	*Version*	*Date*
Contract/Study Agreement [Statement of Activities - Recruiting sites]		02 June 2017
Contract/Study Agreement [Statement of Activities - PICs]		02 June 2017
Copies of advertisement materials for research participants [Phase 2 Advert/ Leaflet]	2	23 February 2017
Copies of advertisement materials for research participants [Phase 3 Advert/ Leaflet]	1	09 February 2017
Covering letter on headed paper [Covering Letter]	1	27 March 2017
Covering letter on headed paper [Covering Letter]	2	12 June 2017
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Verification of Insurance]		29 June 2016
Interview schedules or topic guides for participants [Phase 2 Topic Guide]	1	09 February 2017
Interview schedules or topic guides for participants [Phase 3 Interview guide - fathers]	1	09 February 2017
Interview schedules or topic guides for participants [Phase 3 Interview guide - HVs]	1	09 February 2017
IRAS Application Form [IRAS_Form_15062017]		15 June 2017
IRAS Application Form XML file [IRAS_Form_15062017]		15 June 2017
IRAS Checklist XML [Checklist_15062017]		15 June 2017
Letter from funder [NIHR Letter]		19 January 2016
Letters of invitation to participant [Phase 2 Invitation Letter]	1	23 February 2017
Letters of invitation to participant [Phase 3 Invitation Letter HVs]	1	09 February 2017
Non-validated questionnaire [Phase 3 Demographic Questionnaire HVs]	1	09 February 2017
Non-validated questionnaire [Phase 3 Observation Checklist HVs]	1	09 February 2017
Other [Schedule of Events - PICs]		02 June 2017
Other [Schedule of Events - Recruiting sites]		02 June 2017
Other [Support Services Information Sheet for Fathers]	1	09 February 2017
Other [Text message reminder (Phase - 3)]	1	19 April 2017
Other [Email reminder (Phase - 3)]	1	19 April 2017
Other [Outcome Measures used in Phase 3]	1	05 June 2017
Other [Summary of actions & requested information by REC]	1	12 June 2017
Other [Response to HRA queries]	1	06 June 2017
Other [Transcription Services SLA]	1	22 March 2017
Participant consent form [Phase 2 Participant Consent Form]	3	05 June 2017
Participant consent form [Phase 3 consent form fathers]	1	05 June 2017
Participant consent form [Phase 3 consent Observation]	1	05 June 2017
Participant consent form [Phase 3 consent form HVs]	2	05 June 2017
Participant consent form [Phase 2 Participant Consent Form]	2	23 February 2017
Participant consent form [Phase 3 Participant Consent Form - HVs]	1	09 February 2017
Participant information sheet (PIS) [Phase 2 Participant Information Sheet]	3	05 June 2017
Participant information sheet (PIS) [Phase 3 Participant Information	3	05 June 2017

Sheet - Fathers]		
Participant information sheet (PIS) [Phase 3 Participant Information Sheet - HVs]	2	05 June 2017
Research protocol or project proposal [Study Protocol]	3	21 April 2017
Summary CV for Chief Investigator (CI) [Chief Investigator's CV]	1	27 March 2017
Summary CV for student [Student CV]	1	01 November 2016
Summary CV for supervisor (student research) [Debra Bick CV]	1	27 March 2017
Summary CV for supervisor (student research) [Jane Sandall CV]	1	21 April 2017
Summary CV for supervisor (student research) [Mary Malone CV]	1	19 April 2017
Validated questionnaire [Phase 3 Baseline Questionnaire]	2	05 June 2017
Validated questionnaire [Postnatal Questionnaire 1]	2	05 June 2017
Validated questionnaire [Postnatal Questionnaire 2]	2	05 June 2017

IRAS project ID	203629

Appendix B - Summary of HRA Assessment

This appendix provides assurance to you, the sponsor and the NHS in England that the study, as reviewed for HRA Approval, is compliant with relevant standards. It also provides information and clarification, where appropriate, to participating NHS organisations in England to assist in assessing and arranging capacity and capability.

For information on how the sponsor should be working with participating NHS organisations in England, please refer to the, *participating NHS organisations, capacity and capability* and *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* sections in this appendix.

The following person is the sponsor contact for the purpose of addressing participating organisation questions relating to the study:

Name: Mr Keith Brenna
Tel: 02078486960
Email: keith.brennan@kcl.ac.uk

HRA assessment criteria

Section	HRA Assessment Criteria	Compliant with Standards	Comments
1.1	IRAS application completed correctly	Yes	The statement in A33.1 was an error and has been removed. Non-English speaking fathers will not be included in the study.
2.1	Participant information/consent documents and consent process	Yes	No comments
3.1	Protocol assessment	Yes	No comments
4.1	Allocation of responsibilities and rights are agreed and documented	Yes	The sponsor intends to use the Statement of Activities as a form of agreements with participating organisations.
4.2	Insurance/indemnity arrangements assessed	Yes	Where applicable, independent contractors (e.g. General Practitioners) should ensure that the professional indemnity provided by their medical defence organisation covers the

IRAS project ID	203629

Section	HRA Assessment Criteria	Compliant with Standards	Comments
			activities expected of them for this research study.
4.3	Financial arrangements assessed	Yes	No funds will be provided to participating organisations to support this study.
5.1	Compliance with the Data Protection Act and data security issues assessed	Yes	No comments
5.2	CTIMPS – Arrangements for compliance with the Clinical Trials Regulations assessed	Not Applicable	No comments
5.3	Compliance with any applicable laws or regulations	Yes	No comments
6.1	NHS Research Ethics Committee favourable opinion received for applicable studies	Yes	Provisional Opinion issued 26 May 2017. Further Information Favourable Opinion issued 20 June 2017.
6.2	CTIMPS – Clinical Trials Authorisation (CTA) letter received	Not Applicable	No comments
6.3	Devices – MHRA notice of no objection received	Not Applicable	No comments
6.4	Other regulatory approvals and authorisations received	Not Applicable	No comments

IRAS project ID	203629

Participating NHS Organisations in England

This provides detail on the types of participating NHS organisations in the study and a statement as to whether the activities at all organisations are the same or different.

This is a non-commercial student (PhD) and there are two site types.

- Recruiting sites – identify potential participants, consent and other research activities.
- PICs - will display posters and leaflets.

The Chief Investigator or sponsor should share relevant study documents with participating NHS organisations in England in order to put arrangements in place to deliver the study. The documents should be sent to both the local study team, where applicable, and the office providing the research management function at the participating organisation. For NIHR CRN Portfolio studies, the Local LCRN contact should also be copied into this correspondence. For further guidance on working with participating NHS organisations please see the HRA website.

If chief investigators, sponsors or principal investigators are asked to complete site level forms for participating NHS organisations in England which are not provided in IRAS or on the HRA website, the chief investigator, sponsor or principal investigator should notify the HRA immediately at hra.approval@nhs.net. The HRA will work with these organisations to achieve a consistent approach to information provision.

Confirmation of Capacity and Capability

This describes whether formal confirmation of capacity and capability is expected from participating NHS organisations in England.

Participating NHS organisations in England that are **Recruiting sites will be expected to formally confirm their capacity and capability to host this research**.

- Following issue of this letter, participating NHS organisations in England may now confirm to the sponsor their capacity and capability to host this research, when ready to do so. How capacity and capacity will be confirmed is detailed in the *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* section of this appendix.
- The Assessing, Arranging, and Confirming document on the HRA website provides further information for the sponsor and NHS organisations on assessing, arranging and confirming capacity and capability.

The HRA has determined that participating NHS organisations in England that are **PICs are not expected to formally confirm their capacity and capability to host this research.**

- The HRA has informed the relevant research management offices that you intend to undertake the research at their organisation. However, you should still support and liaise with these organisations as necessary.
- Following issue of the Letter of HRA Approval the sponsor may commence the study at these organisations when it is ready to do so.
- The document "Collaborative working between sponsors and NHS organisations in England for HRA Approval studies, where no formal confirmation of capacity and capability is expected" provides further information for the sponsor and NHS organisations on working

	with NHS organisations in England where no formal confirmation of capacity and capability is expected, and the processes involved in adding new organisations. Further study specific details are provided the *Participating NHS Organisations* and *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* sections of this Appendix.

Principal Investigator Suitability

This confirms whether the sponsor position on whether a PI, LC or neither should be in place is correct for each type of participating NHS organisation in England and the minimum expectations for education, training and experience that PIs should meet (where applicable).
A PI is expected at the Recruiting sites. No PI or LC is expected at the PICs sites. GCP training is not a generic training expectation, in line with the HRA statement on training expectations.

HR Good Practice Resource Pack Expectations

This confirms the HR Good Practice Resource Pack expectations for the study and the pre-engagement checks that should and should not be undertaken
Where arrangements are not already in place, network staff (or similar) undertaking any research activities that may impact on the quality of care of the participant (such as administration of IMP, informed consent procedures etc), would be expected to obtain an honorary research contract from one NHS organisation (if university employed), followed by Letters of Access for subsequent organisations. This would be on the basis of a Research Passport (if university employed) or an NHS to NHS confirmation of pre-engagement checks letter (if NHS employed). These should confirm enhanced DBS checks, including appropriate barred list checks, and occupational health clearance. For research team members undertaking activities that do not impact on the quality of care of the participant (for example, administering questionnaires) a Letter of Access based on standard DBS checks and occupational health clearance would be appropriate.

Other Information to Aid Study Set-up

This details any other information that may be helpful to sponsors and participating NHS organisations in England to aid study set-up.
The applicant has indicated that they intend to apply for inclusion on the NIHR CRN Portfolio.

APPENDIX - 15

NHS
Health Research Authority

London - Fulham Research Ethics Committee
Barlow House
3rd Floor, 4 Minshull Street
Manchester
M1 3DZ

Telephone: 0207 104 8001

Please note: This is the favourable opinion of the REC only and does not allow you to start your study at NHS sites in England until you receive HRA Approval

20 June 2017

Professor Debra Bick
Professor of Evidence Based Midwifery Practice/Editor in Chief 'Midwifery' journal
King's College London
Florence Nightingale Faculty of Nursing and Midwifery/Division of Women's Health
James Clerk Maxwell Building, 57 Waterloo Road
London
SE1 8WA

Dear Professor Bick

Study title:	**Testing the feasibility and acceptability of an intervention to improve first time fathers'transition to fatherhood focusing on the role of mental health and wellbeing**
REC reference:	**17/LO/0815**
IRAS project ID:	**203629**

Thank you for your letter responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this opinion letter. Should you wish to provide a substitute contact point, require further

information, or wish to make a request to postpone publication, please contact hra.studyregistration@nhs.net outlining the reasons for your request.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation subject to the conditions specified below.

Conditions of the favourable opinion

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for NHS permission for research is available in the Integrated Research Application System, www.hra.nhs.uk or at http://www.rdforum.nhs.uk.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations

Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database within 6 weeks of recruitment of the first participant (for medical device studies, within the timeline determined by the current registration and publication trees).

There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

To ensure transparency in research, we strongly recommend that all research is registered but for non-clinical trials this is not currently mandatory.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact hra.studyregistration@nhs.net. The expectation is that all clinical trials will be registered, however, in exceptional circumstances non registration may be permissible with prior agreement from the HRA. Guidance on where to register is provided on the HRA website.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Ethical review of research sites

NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Non-NHS sites

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Copies of advertisement materials for research participants [Phase 2 Advert/ Leaflet]	2	23 February 2017
Copies of advertisement materials for research participants [Phase 3 Advert/ Leaflet]	1	09 February 2017
Covering letter on headed paper [Covering Letter]	1	27 March 2017
Covering letter on headed paper [Covering Letter]	2	12 June 2017
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Verification of Insurance]		29 June 2016
Interview schedules or topic guides for participants [Phase 2 Topic Guide]	1	09 February 2017
Interview schedules or topic guides for participants [Phase 3 Interview guide - fathers]	1	09 February 2017
Interview schedules or topic guides for participants [Phase 3 Interview guide - HVs]	1	09 February 2017
IRAS Application Form [IRAS_Form_26042017]		26 April 2017
IRAS Application Form [IRAS_Form_15062017]		15 June 2017
IRAS Application Form XML file [IRAS_Form_26042017]		26 April 2017
IRAS Application Form XML file [IRAS_Form_15062017]		15 June 2017
IRAS Checklist XML [Checklist_26042017]		26 April 2017
IRAS Checklist XML [Checklist_15062017]		15 June 2017
Letter from funder [NIHR Letter]		19 January 2016
Letters of invitation to participant [Phase 2 Invitation Letter]	1	23 February 2017
Letters of invitation to participant [Phase 3 Invitation Letter HVs]	1	09 February 2017
Non-validated questionnaire [Phase 3 Demographic Questionnaire HVs]	1	09 February 2017
Non-validated questionnaire [Phase 3 Observation Checklist HVs]	1	09 February 2017

Other [Support Services Information Sheet for Fathers]	1	09 February 2017
Other [Text message reminder (Phase - 3)]	1	19 April 2017
Other [Email reminder (Phase - 3)]	1	19 April 2017
Other [Outcome Measures used in Phase 3]	1	05 June 2017
Other [Summary of actions & requested information by REC]	1	12 June 2017
Other [Response to HRA queries]	1	06 June 2017
Other [Transcription Services SLA]	1	22 March 2017
Participant consent form [Phase 2 Participant Consent Form]	2	23 February 2017
Participant consent form [Phase 3 Participant Consent Form - HVs]	1	09 February 2017
Participant consent form [Phase 2 Participant Consent Form]	3	05 June 2017
Participant consent form [Phase 3 consent form fathers]	1	05 June 2017
Participant consent form [Phase 3 consent Observation]	1	05 June 2017
Participant consent form [Phase 3 consent form HVs]	2	05 June 2017
Participant information sheet (PIS) [Phase 2 Participant Information Sheet]	2	23 February 2017
Participant information sheet (PIS) [Phase 3 Participant Information Sheet - Fathers]	2	23 February 2017
Participant information sheet (PIS) [Phase 3 Participant Information Sheet - HVs]	1	09 February 2017
Participant information sheet (PIS) [Phase 2 Participant Information Sheet]	3	05 June 2017
Participant information sheet (PIS) [Phase 3 Participant Information Sheet - Fathers]	3	05 June 2017
Participant information sheet (PIS) [Phase 3 Participant Information Sheet - HVs]	2	05 June 2017
Research protocol or project proposal [Study Protocol]	3	21 April 2017
Summary CV for Chief Investigator (CI) [Chief Investigator's CV]	1	27 March 2017
Summary CV for student [Student CV]	1	01 November 2016
Summary CV for supervisor (student research) [Mary Malone CV]	1	19 April 2017
Summary CV for supervisor (student research) [Debra Bick CV]	1	27 March 2017
Summary CV for supervisor (student research) [Jane Sandall CV]	1	21 April 2017
Validated questionnaire [Phase 3 Baseline Questionnaire]	1	09 February 2017
Validated questionnaire [Postnatal Questionnaire 1]	1	09 February 2017
Validated questionnaire [Postnatal Questionnaire 2]	1	09 February 2017
Validated questionnaire [Phase 3 Baseline Questionnaire]	2	05 June 2017
Validated questionnaire [Postnatal Questionnaire 1]	2	05 June 2017
Validated questionnaire [Postnatal Questionnaire 2]	2	05 June 2017

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The HRA website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website:
http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/

HRA Training

We are pleased to welcome researchers and R&D staff at our training days – see details at
http://www.hra.nhs.uk/hra-training/

17/LO/0815	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project.

Yours sincerely

PP

The Rev'd Nigel Griffin (Chair)
Chair

Email:nrescommittee.london-fulham@nhs.net

Enclosures: "After ethical review – guidance for researchers" *[SL-AR2]*

Copy to: *Dr Keith Brennan*
Mary Jawad, Guy's & St Thomas' Foundation NHS Trust

APPENDIX - 16
Email received 8th June 2018

Dear Professor Bick,

IRAS Project ID:	203629
Short Study Title:	New Dad Study (Version - 1)
Amendment No./Sponsor Ref:	1
Amendment Date:	19 April 2018
Amendment Type:	Substantial Non-CTIMP

I am pleased to confirm **HRA and HCRW Approval** for the above referenced amendment.

You should implement this amendment at NHS organisations in England and Wales, in line with the conditions outlined in your categorisation email.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/.

Please contact hra.amendments@nhs.net for any queries relating to the assessment of this amendment.

Kind regards,

Natalie

Natalie Wilson
Health Research Authority
Ground Floor | Skipton House | 80 London Road | London | SE1 6LH
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W. www.hra.nhs.uk

APPENDIX – 17

Systematic Review Protocol: Final Accepted Manuscript

Review title

First time fathers' needs and experiences of transition to fatherhood in relation to their mental health and wellbeing: A qualitative systematic review protocol.

Corresponding Author

Sharin Baldwin

Florence Nightingale Faculty of Nursing and Midwifery, King's College London, email: sharin.baldwin@kcl.ac.uk

Center conducting the review

Name of center: The Nottingham Centre for Evidence Based Healthcare

Review question/objective

This qualitative review seeks to identify first time fathers' needs and experiences in relation to their mental health and wellbeing during their transition to fatherhood. This will include resident first time fathers who are either the biological or non-biological father. (Please see background section for definitions of the terminology used).

The objectives are to focus on first-time fathers' experiences in relation to:

- How mental health and wellbeing are experienced
- Perceived needs around mental health
- The ways in which mental health problems are experienced, manifested, recognised and acted upon
- The contexts and strategies that are perceived to support mental well being
- Perceived barriers and facilitators to accessing support for their mental health and wellbeing

Background

Men's Mental Health & Wellbeing

Men's mental health and wellbeing during their transition to fatherhood is an important public health issue that is currently under-researched and poorly

understood.[1] A recent systematic review which included forty-three papers reported that the prevalence rates for any anxiety disorder in men ranged between 4.1% - 16.0% during their partners' pregnancy and 2.4% – 18.0% during the postnatal period.[2] Prevalence rates of antenatal and postnatal depression in fathers in a systematic review of twenty studies ranged from 1.2% - 25.5%.[3] With the exception of one study, which assessed depression through a qualitative interview, the remaining studies in this review used standardised self-report instruments with established reliability and validity.[3] A meta-analysis of forty-three studies reported depression in 10.4% of fathers between the first trimester of their partner's pregnancy and one year postpartum, with the peak time being between 3 and 6 months after the birth, similar to findings for postnatal women.[1] Studies included in the meta-analysis used variable methods of measuring and identifying depression: self-report rating scales were used in forty studies, while interviews were used in the remaining three.[1] Symptoms of anxiety and stress have also been reported alongside depression among men during and after their partner's pregnancy.[4-9]

Impact on Child

Poor mental health in fathers has been shown to impact on their child's cognitive, social and behavioural development. Ramchandani et al [10], in a prospective cohort study, which controlled for mothers' depression and for fathers' education levels, found that the presence of symptoms of severe postnatal depression in fathers (assessed using the Edinburgh Postnatal Depression Scale) was associated with emotional and behavioural problems in their children at around three years of age, particularly in boys. Moreover, children with two depressed parents were at higher risk of poor development outcomes.[11] In addition to negative impacts on the child, poor mental health in fathers can impact on the mother and the couple's relationship.[12] A recent study of first-time parents' transition to parenthood highlighted the importance of focusing interventions on strengthening couple relationships and parents' feelings of unworthiness.[13]

Risk Factors

Risk factors for anxiety and depression in men during their transition to fatherhood can include factors such as an unsupportive marital relationship, paternal unemployment, immaturity, an unplanned pregnancy [14, 15]; history of depression, young parental age and higher social deprivation;[16] poor social and emotional support;[17,18] having a partner with elevated depressive symptoms or depression, and poor relationship satisfaction.[19] Data on 3219 biological resident fathers who participated in a longitudinal study of children in Australia found that risk factors associated with psychological distress postnatally included poor job quality, poor relationship quality, maternal psychological distress, having a partner in a more prestigious occupation and low parental self-efficacy.[20] In a more recent cross-sectional study of first-time expectant fathers, Da Costa et al [21] factors associated with antenatal depressive symptoms in men included poorer sleep quality, family history of psychological difficulties, lower perceived social support, poorer marital

satisfaction, more stressful life events in the preceding 6 months, greater number of financial stressors, and elevated maternal antenatal depressive symptoms.

Signs & Symptoms

Symptoms of depression in fathers may manifest as low self-esteem, hostility, conflict, and anger. [22-24] Fathers suffering from depression may withdraw or engage in 'escape activities' such as overwork, sports, gambling, and excessive drinking.[25, 26] Some symptoms of depression during the perinatal period experienced by mothers and fathers are similar, such as deep feelings of abandonment and powerlessness, however other symptoms such as alcohol and substance abuse may more frequently manifest in men.[22] General population studies have also reported that depression symptoms manifest differently in men than women.[27-29] In a recent Delphi study of 14 international experts (including clinicians or professionals working directly with fathers, trainers, researchers and those who have published in peer-reviewed articles about 'fathers'), paternal depression was described as, low mood, negative thoughts, somatic issues (low hunger, weight loss, sleep issues), along with 'masked male depression' symptoms such as irritability, withdrawal/ isolation and increases in substance use (or other dopaminergic types of activities like gambling and cheating) during pregnancy or within a year or so postpartum".[30] As men have different communication and coping styles compared to women [31], they may be reluctant to discuss their mental health symptoms or concerns due to wanting to put their partner's needs first.[32]

Current knowledge and Gaps

The Royal Society for Public Health in the UK recommends that it is important to actively promote positive mental wellbeing rather than just focussing on preventing and treating mental illness.[33] The World Health Organisation (WHO) defines mental health as "a state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". [34, (p-XIX)] A Cochrane Library systematic review of group-based parenting programmes for improving parental psychosocial health, found that only 4 of the 48 included studies reported separate outcome data from fathers.[33] While these showed a statistically significant short-term improvement in paternal stress following interventions that included cognitive and behavioural strategies, individual study results were inconclusive for any effect on depressive symptoms, confidence or partner satisfaction. The review authors concluded that this was: "*a serious omission given that fathers now play a significant role in childcare and research suggests that their psychosocial functioning is key to the wellbeing of children*".[35 (p-21)]

A systematic review of interventions for prevention or treatment of depression in fathers identified four studies, all focussing on treatment rather than prevention, with findings inconclusive due to wide study heterogeneity.[36] This review

highlighted the need for randomised controlled trials to identify effective mental health interventions for men in the postnatal period, particularly preventative interventions.[36] Another systematic review of intervention programmes to prevent or treat paternal mental illness in the perinatal period included eleven studies - five of which described psychosocial programmes (emphasising skills, knowledge, emotional well-being, and social well-being related to parenting), three focused on the effects of massage techniques (partner massage and infant message), and three which used couple-based sessions (focused on the couple relationship and co-parenting).[37] Eight studies were randomised controlled trials; however, six trials did not provide adequate information on randomisation processes and risk of bias cannot be ruled out. The review authors reported significant intervention effects for a variety of fathers' mental health outcomes (including stress, depression, anxiety, anger levels and self-esteem) for two of the psychosocial approaches [38, 39], and three that employed massage techniques.[40-42] There were no significant changes reported in paternal mental health following couple-based interventions. Study limitations included poor reporting of study designs, variation in outcome measures used, and limited statistical analyses.

Health professionals' failure to engage with fathers during or around the time of birth could be a reason for the lack of evidence on first time fathers' mental health and wellbeing.[43] Fathers may feel marginalised and unacknowledged by health professionals during the perinatal period, and report a lack of appropriate information on pregnancy, birth, child care, and balancing work and family responsibilities.[44,45,46] Research of health visitors' practice has found that they do not involve fathers [47] and are perceived by fathers as a service provided 'by women, for women'.[48] A Department of Health for England funded literature review on service users' views suggested that some fathers welcomed the opportunity to express their feelings and emotions about fatherhood when asked by a healthcare professional [49], but did not always have the opportunity to do this spontaneously.[50]

A systematic review of evidence on parenting interventions which included men as parents or co-parents showed that insufficient attention was paid to reporting fathers' participation and fathers' impacts on child or family outcomes.[51] The importance of assessing men's mental health in the perinatal period [52], and identifying the best methods for supporting fathers [53] still remains. Few studies distinguished between biological or non-biological fathers, or if fathers were resident or non-resident in the family home. Better understanding of the experiences of first time fathers, whether biological or non-biological, during their transition to fatherhood and identifying what information and support they consider could help their mental health and wellbeing, would enable the development of appropriate and timely healthcare professional-led interventions likely to be more acceptable to fathers. Barriers and facilitators to enable first time fathers to access help or support for their mental health and well-being needs could also be identified. This systematic review will create a deeper knowledge of first time fathers' experiences, needs and help seeking behaviors relating to mental health and wellbeing during their transition to fatherhood and how fathers could be better supported during this time.

In this context, first time fathers refers to men becoming either a biological or non-biological parent for the first time, and resident fathers meaning those residing with their expectant partner, or their partner and child during their transition to fatherhood. The transition to fatherhood is the period from conception to 1 year after birth and will apply to both biological and non-biological fathers. Mental health problems will include any psychological difficulty or distress including depression, anxiety, and stress. These may be diagnosed by health professionals or self-reported by fathers. Mental wellbeing will include positive mental health, covering both the hedonic (feeling good) and eudemonic components (functioning well) of psychological wellbeing.

Searches of the Joanna Briggs Institute Library of Systematic Review Protocols, Joanna Briggs Institute Library of Systematic Reviews, Cochrane Library, MEDLINE, PROSPERO and DARE databases were carried out and although a small number of systematic reviews relating to this topic were identified and cited above, there were no qualitative systematic reviews found that attempted to answer this review question.

Inclusion criteria

Types of participants

This review will consider studies that include resident first time fathers (biological and non-biological) during their transition to fatherhood, from pregnancy commencement until one year after birth. Study participants will include first time fathers of healthy babies born with no identified terminal or long term conditions.

Certain groups of fathers may have specific mental health needs during their transition to fatherhood. As this review focuses on the mental health and wellbeing of fathers in general and not of those with specific additional needs, the following will be excluded:

- Studies on non-resident/ absent fathers (those not residing with the mother/child during the period between conception to 1 year after birth)
- Studies on fathers experiencing bereavement following neonatal death, stillbirth, pregnancy loss, sudden infant death
- Studies on fathers whose infants are born prematurely (≤37 weeks gestation)
- Studies on fathers with a child with terminal/ long term conditions

Phenomena of interest

First time fathers' needs and experiences during their transition to fatherhood in relation their mental health and wellbeing.

Context

This review will consider studies undertaken in high income countries as defined by the World Bank[54] (for example countries which are members of the European Economic Community, the UK, the United States, Canada, Australia and New Zealand) that investigate first time fathers' experiences, during any time from conception to one year after birth. The majority of these countries have similar healthcare systems (with a mix of public and privately funded and universal service provision), social and political systems, meaning that review findings are likely to be more transferable.

Types of studies

The review will consider studies that focus on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography and action research. The review will also consider qualitative data reported within quantitative surveys for inclusion, where open questions relating to the phenomena of interest have been asked.

Search strategy

The search strategy aims to identify published and unpublished studies. A three-step search strategy will be utilized. An initial limited search of MEDLINE (using Ovid) and CINAHL will be undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe article. A second search using all identified keywords and index terms will then be undertaken across all included databases. Thirdly, the reference list of all identified reports and articles will be searched for additional studies.

Studies published in English will be considered for inclusion in this review due to the difficulties associated with resources for translation. Computerized searches for studies published between 1960 - present will be considered for inclusion in this review, due to the shift in fathers' roles following the feminist movement.

The data bases to be searched include:

MEDLINE (Ovid)

CINAHL

EMBASE

PsycINFO

Maternity and Infant Care

HMIC

British Nursing Index

Web of Science

Searches will also be carried out of the website of The Fatherhood Institute, which is the UK's leading charitable organisation for fathers and fatherhood. The Institute collates and publishes international research on fathers and impact of their role on children and mothers.

The search for unpublished studies such as theses and dissertations will include:

ProQuest Dissertations & Theses Global

WorldCatdissertations and Theses (OCLC)

Keywords will include: Father, men, paternal, dad, male, partner, support, intervention, prevention, therapy, counselling, help, programme, service, education, treatment, online, health, health promotion, professional, midwife, doctor, GP, health visitor, nurse, self-help, partner, friend, family, sport, social support, physical activity, parenthood, fatherhood, transition, perinatal, postnatal, postpartum, antenatal, antepartum, prenatal, intrapartum, pregnancy, baby, child, mental, mental health, emotional, psychological, wellbeing, sad, distress, depression, anxiety, stress, postnatal depression, feeling, PTSD, trauma.

Assessment of methodological quality

Qualitative papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion, or with a third reviewer.

Data collection

Qualitative data will be extracted from papers included in the review using the standardized data extraction tool from JBI-QARI (Appendix II). The data extracted will include specific details about the interventions, populations, study methods and outcomes of significance to the review question and specific objectives.

Data synthesis

Qualitative research findings will, where possible be pooled using JBI-QARI. This will involve the aggregation or synthesis of findings to generate a set of statements that represent that aggregation, through assembling the findings rated according to their quality, and categorizing these findings on the basis of similarity in meaning. These categories are then subjected to a meta-synthesis in order to produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Where textual pooling is not possible the findings will be presented in narrative form.

Conflicts of interest

There are no conflicts of interest

Acknowledgements

This review is being undertaken as part of a Clinical Doctoral Fellowship funded by the UK National Institute for Healthcare Research.

Disclaimer

Sharin Baldwin is funded by a National Institute for Health Research (Clinical Doctoral Fellowship, ICA-CDRF-2015-01-031).This paper presents independent research funded by the National Institute for Health Research (NIHR). The views expressed are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health.

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Appendix I: Appraisal instruments

QARI Appraisal instrument

JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	☐	☐	☐	☐
2. Is there congruity between the research methodology and the research question or objectives?	☐	☐	☐	☐
3. Is there congruity between the research methodology and the methods used to collect data?	☐	☐	☐	☐
4. Is there congruity between the research methodology and the representation and analysis of data?	☐	☐	☐	☐
5. Is there congruity between the research methodology and the interpretation of results?	☐	☐	☐	☐
6. Is there a statement locating the researcher culturally or theoretically?	☐	☐	☐	☐
7. Is the influence of the researcher on the research, and vice- versa, addressed?	☐	☐	☐	☐
8. Are participants, and their voices, adequately represented?	☐	☐	☐	☐
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	☐	☐	☐	☐
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	☐	☐	☐	☐

Overall appraisal: ☐ Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

_____

_____

_____

Appendix II: Data extraction instruments

QARI data extraction instrument

JBI QARI Data Extraction Form for Interpretive & Critical Research

Reviewer _____ Date _____

Author _____ Year _____

Journal _____ Record Number _____

Study Description

Methodology

Method

Phenomena of interest

Setting

Geographical

Cultural

Participants

Data analysis

Authors Conclusions

Comments

Complete Yes ☐ No ☐

Findings	Illustration from Publication (page number)	Evidence		
		Unequivocal	Credible	Unsupported

Extraction of findings complete Yes ☐ No ☐

APPENDIX – 18

Qualitative Interview Topic Guide (Study Phase 2)

NEW DAD STUDY

The interview should take no longer than 90 minutes and you are free to leave the study at any point. Do you have any questions before we start the interview?

Topic Guide: (*Questions will be related to these topic areas and based on findings of the systematic review)*

1. Tell me about your experience of becoming a father for the first time? How do you feel about it?
2. How prepared did you feel? What information helped you to prepare for becoming a father?
3. How has becoming a father impacted on your emotional wellbeing?
4. How have you coped with the changes of becoming a dad?
5. How would you describe your relationship with your partner? Have you noticed any changes? How have you been getting on since becoming a father?
6. What support systems do you have in place? What other support/resources have you accessed (*online resources or support)?*
7. How was the support from health professionals (*MW, HV, GP both antenatally and postnatally)?*
8. What helpful information, resources or advice did you received about becoming a father (*such as leaflets, websites, forums, antenatal/ postnatal classes, health promotion sessions, visit from health visitor)?*
9. What other information/ resources do you think would have been useful?
10. What have been the barriers to accessing help/ support?
11. What would enable you to better access help or support?
12. When would be the best time for receiving support or information about emotional wellbeing relating to becoming a father? *E.g. – start of pregnancy, later stages of pregnancy, soon after the baby is born, ongoing etc.*

This is the end of the interview. I would like to thank you very much for taking part in this study. Do you have any questions you would like to ask?

Appendix – 19

Additional quotes for each theme, not included in the published paper

Preparation for fatherhood

"…it was, kind of, towards the end of it, when we started going to baby shows and, kind of, buying everything that we, kind of, felt that actually, yes, we are now a little bit more prepared and we started, kind of, researching, in terms of what car seats we wanted and what type of things we'll need, did I at least, kind of, feel that, okay, we are starting to get prepared now" [Neil]

"I think we were prepared, in terms of having the right equipment, the right stuff for the clothes, and the sterilizer and stuff and, you know, ready for it, you know, the pram, the pushchairs, the car seat" [Pritesh]

"We did a lot of research and preparation beforehand… we had read a lot of books. There are some really good sources of information and it's not just books, but you can access good information at NHS websites, etc.," [Sanjay]

"The sessions [antenatal classes] were really useful. The information shared was about - so, when you're into labour what you should do and whom should you contact, starting from that until - then the next information was, how would your labour go through and how would you deliver a baby, after you delivered a baby how you should take care of him. So, it was the sessions were covering all of these. So…that was really helpful because I would say the Midwife just did not speak about the mum and the baby, they were speaking about the father as well and what was their role and…" [Ali]

"….just things like talking about what you then need to do with a newborn baby, with the father as well as the mothers, like to do with feeding, to do with changing and to do with sleep patterns. And then, also we'd actually had a bit of practice, sort of, with dolls, you know, like change the nappy on this doll and that was really useful as well." [Charlie]

"I think when there was an element of that where they actually talked about C-sections and I wasn't expecting them to, and I don't know why, I just wasn't. Maybe 'cause in my head I always thought we were going to have a natural birth, and there was one moment in that, where they got one of the fathers to go on the floor and be the mother, and they got all the other fathers to stand around that individual and say, right, this is - there was like eight of us, and they go, "This is the amount of people that are going to be in the room if you have a C-section," and I was like, "Whoa, wow, all these people," and they were all introducing themselves and that obviously was replicated in the real thing. So, it, kind of, did put me a little bit at ease without even knowing." [Ahmed]

"…..what was helpful was meeting other, sort of, likeminded parents, prospective parents in the, sort of, same situation as us. So, we got to - obviously, that's invaluable really, you get to, kind of, talk over concerns and anxieties, and all the, sort of, things. You know, just makes you feel like you're not on your own, as it were, you know, it makes you realise that everyone has got, sort of, the similar type of situation as you're, kind of, going into." [Tom]

"To be honest, yes, there was a lot of information given to me, but in the line of work that I do, I don't - I didn't really have the time to sit there and read through leaflets etc., etc." [Dev]

"Antenatal classes being in middle of the day makes it challenging to try and fit all of them in." [Sanjay]

"We were not very explicitly told about the antenatal classes and things like that. So, we didn't - we - so, basically, neither did my wife or I got an opportunity to attend that." [Jay]

"…..So, I don't think it was ever, kind of, focused around the social, mental aspects of it. It was more, kind of, focused around the practical sides of things." [Neil]

Rollercoaster of feelings

Mixed feelings

"Well, of course, I was happy, excited, bit of nervousness…."[Jay]

"….you know…..there's still some of the unknowns, some mystery, there's some - I mean, the unknown and fear are often synonymous. So, therefore, there are also little worries, you know, 'cause I don't look too far into the future." [Richard]

Not real

"Whereas for me, the only time I experience a change is from when she has that first scan, where you actually see the baby move and stuff, and then after that it goes away. Then she has a second scan and those feelings come back again and then obviously, her body's changed, so you know that she's going through these changes, but you're not really feeling them, because it's just - you're just, kind of, experiencing those two periods and then, it - and then that - all that side of the stuff goes away again and you're back to normal, like." [Arjun]

"I mean, we've talked about it, obviously, you know, she was pregnant for nine months and you're, sort of, you know, my missus is feeling all these kicks and getting me to feel the belly and so forth, and it's amazing, it's lovely. But it wasn't until, you know, for a father, or maybe not just a father, for me, it was very hard to process it and that the baby is there sometimes. I know it sounds really bad, but it just - that, it just, it was just that acceptance and understanding was quite difficult" [Ahmed]

"….early on where there's the giddy excitement and then it doesn't feel it's real." [Sam]

New identity

Sense of accomplishment & personal growth

"… the best thing about being a dad is the feeling you have and the responsibilities you have to take care of the family, you know, just knowing you have formed a family" [Ali].

"I guess, having a baby, that's all about manning up and not in like, I'm going to have a fight with someone, but in just, these are your responsibilities, deal with it or learn how to deal with it. That's - I remember, yeah, for months just thinking, yeah, man-up, this is time. I've never had to do this in my life." [Lee]

" It's probably made me a little bit more resilient, in the sense that I'm able to, kind of, handle the endless crying or the, kind of, periods of where she's, kind of, a little bit restless, and things like that. So, I think it's probably been helpful, kind of, undergoing that, kind of, stress in a positive way, because it's, kind of, made me that little bit more resilient to the changes" [Neil]

"It affects your outlook on how you look at things and moves you away from being such a control freak or like - I think" [Adrian]

Changed person

"..you tend to become more disciplined. Like, I don't know about others, but I became a bit more disciplined, in terms of, like, no late nights and things like that." [Jay]

"I - you know, you get a different perspective of life. I know that sounds a bit cliché, but you do, definitely. And you do get happiness in other ways. So, it's definitely overall a positive thing," [Sam]

"I think there's a - there's also a, sort of, desire to do more and, you know, not just at home, but, you know, do more at work and try and make sure that you're secure as the provider of the family." [Sanjay]

"I have to now plan for his future as well, because initially, you don't have to do all of those things, but now my wife and myself will sit together and speak about, you know - about his schoolings and about his classes and how much you should save for his things." [Ali]

"… having my daughter here has made me want to do more and pushed me to achieve it more, knowing that I've got her, so then she can know that her dad is good and follow in my footsteps…"[Lloyd]

Challenges & impact

Challenges relating to labour & birth

“The birth was quite crazy. It’s - don’t know, it was a very hard experience for my wife, but I didn’t know women go through that. It’s tough, but like, she - I just had to support her like, as a husband, like, you just support her as much as you can and do whatever you need for her, and then going through the actual labour, it’s - I guess, because it was our first time, I didn’t know what to expect”. [Arjun]

“And, you know, and you think, you know, it’s an operation, it’s a major operation as they’re cutting her. So, yeah, it was quite stressful.” [Krish]

Tiredness, exhaustion & stress in early fatherhood

“….so, you know, lack of sleep, you know, that - my first week back at work and I’m there falling asleep on my desk.” [Krish]

“there were times when - ‘cause you were going to work with lack of sleep and sometimes you’re like ah - and when his colic was quite bad. Sorry, when his colic was quite bad, and I was coming home from work and he would just cry and cry and just, like, “I’m shattered” [laughs]. Need to eat; haven’t eaten and [laughs] the first thing I want to do when I come home is almost, just like, have food, start cooking straightaway and when you’re hungry and tired and you’ve got a screaming baby, that stuff.” [Sam]

“It has been tiring, you know, coming home at, you know, 7 o’clock or 6:30 and then, kind of, right, okay, bags down, straight onto, you know, kind of, help - taking over for a bit. So, yeah, but it’s a - it’s been, kind of, you know, probably out of my 100% of my brain power, thinking 80% of it has been, kind of, at home, kind of, thinking okay and then the other 20% trying to work and balance catching up on things.”[P8]

“More stress. Finding it harder to get like, work life home life balance, really. You always want to be at home. You want to support your family.” [Ravi]

“it’s all that, sort of, balance that I’m - you know, I’m really, sort of, anxious about how to best make it work. Yeah, it’s - so, I suppose it’s more like, professional career base alongside being a parent.” [Adrian]

“Going back to work was quite hard. ….leaving them during the day, for a five or six-hour stint, or even a whole day, suddenly seemed really brutal, really harsh. I wasn’t quite prepared for how wrenching it would feel going to work and leaving them. [David]

“Before, you used to have a little period where you get to have your time. But, you know, before you used to have that little piece of mind where you got ten, 15 minutes to yourself just to think. You don’t get that any more.” [Dev]

"….now it's just a big, sort of, change that I have to, kind of, get into work early, get out of work early and then, the evening at the moment is mostly just doing things to look after the baby or the house, and that's life at the moment. I think I'm obviously more tired, so there isn't much time for anything except for, sort of, work, looking after the baby and then, a little bit of leisure on the weekend." [Charlie]

Increased worries & pressure

"Like, earlier, my wife used to be, like, we used to do equally all the things. But then, over the period of time, like, the domestic side of the household falls more on you, like, especially, like, cleaning and things like that. She's not able to go to the grocery and thing, do things like that. And at times, she will have her own pregnancy sickness, so you need to make sure that she's, you know, looked after well." [Jay]

"I didn't mind the baby not wanting to necessarily spend time with me. But the fact that I couldn't give R respite was a little bit difficult." [Sam]

"There's getting the finances sorted out and looking at the baby's health,…" [Richard]

"….your whole world changes and your whole responsibilities and, kind of, you knew you'd got priorities, but you - I guess, an element of it, you now look at it and think, you've got a bigger financial strain." [Ravi]

"…there's also a, sort of, desire to do more and, you know, not just at home, but, you know, do more at work and try and make sure that you're secure as the provider of the family. So, you put more of an effort in almost every week, but you're burning the candle at both ends at the same time. I don't think that's necessarily completely healthy, but I think it - you're just, sort of, still going on adrenalin, and understanding you have new responsibility." [Sanjay]

"At night time, you know, I was - 'cause K, his name's K, he sleeps with us, but - so, I keep waking up in the night just to have a look, is he alright, do you know what I mean?" [Krish]

"there's times when you don't know what the baby wants, so when the baby's crying…" [Dev]

"And then, like, if she's crying, like you don't really know what she's saying like, is she hungry? Is her nappy wet? Is she tired? Is she cold? Is she hot?" [Arjun]

"Having a baby is a massive challenge [laughs]. It's challenging, just knowing the right thing to do and being able to, sort of, read what he's trying to tell you or what he's not trying to tell you, but what's going on with him, getting that right, that's been a challenge." [Lee]

Emotional impact

"So there was never a, kind of, point in time where she would take comfort from myself and that, kind of, is a little bit demoralising and demotivating, in the sense that you can't put her to sleep and you can't, kind of, do any of that." [Neil]

"I think for the man, they probably, they don't talk about the fact that the bonding experience with the baby's not there straightaway." [Sam]

"you do feel a little bit, as a dad in the situation, assuming the baby's breastfeeding, which C is exclusively, you do - you can feel a little bit, sort of, devoid and a bit - you know, like, you want to do all you can, but there's only so much you can do 'cause, at the end of the day, you can't feed the baby and that's what they want." [Tom]

Rewards of fatherhood

"I'm really enjoying fatherhood and just, kind of, enjoying really all the, sort of - all the things that you have like, you know, the first smile and everything and then she's, sort of, starting to lift her head up a little bit now…..just watching her grow really is a really, really fascinating thing and it's just nice". [Tom]

"He's a lot of fun, 'cause he's so variable in his moods and his - you know, his daily demeanour. There's a new development every day. We're obsessed with watching him smile, whether - we don't really know whether it's an official smile or not, but, yeah, so who knew that you could have so much fun just watching him get to know the world?.....it's amazing how much I want to get involved and, sort of, get down on the floor with him and discover and explore the world. So, it's also a bit of the reawakening of the inner child for me, which is a lot of fun." [David]

Changed relationship: we're in a different place

"Our relationship is good, you know, it's a - it's something that, you know, it's just come over time, to the point where we've just become stronger. I feel like I haven't - it's just in a sense, you know, I feel like it's brought us together, a lot closer. It's brought us a lot closer." [Lloyd]

"Yeah, and it's bought us closer, definitely. Yeah, so there's a lot more - and I think the bond has just become a bit stronger now, you know, we've got a little one to look after now together. You know, it's not "I", there's no "I" in it, so, it's good." Dev[]

"It's a positive boost. So, it's perfect at the moment. I can't complain. Even my - well, C and myself, our life like a couple was perfect, but now it's even better. So, everything has improved, to be honest….. It's probably the - our best moment in our relationship, because yeah, we feel complete, as what I said. I think that the word that can define better how we feel is complete, yeah." [Miguel]

“I think we’ve got closer. I think it’s a - we’re a lot more dependent on each other, we have to be. It’s - yeah, you just have to and you have to be there for each other.” [Ravi]

"We’ve both got that understanding and support. She knows that she’s - the support’s there for her. She knows that I’ll take over and do things, so, yeah, there is - you know, the relationship’s there. I think it’s - and if I say it’s probably grown stronger, you know, it has because we’re both now, kind of, bound - you know, okay, before it was like, you know, yeah, we’ll do this, you do that. But yeah, it’s much more strong in terms of, kind of, we’ve both got now some duties to, kind of, manage and we both work together, but yeah, so…" [Krish]

"….. just to come to think about it, in the last six weeks it’s almost like I haven’t really spoken to her or, like, seen her or had, like, a conversation, ‘cause it’s just been a blur. It’s just been everything just revolved around the baby, to be honest, yeah." [Akash]

“Maybe, since we’ve had the baby, five or six times I can say we had sex and it’s not for lack of want - I think M recognises that like her body’s changed obviously, and yeah, you know what’s it like, but it’s just finding the time when we’re both not knackered [laughs] and the baby’s screaming at us, but yeah, it’s been hard…..what possibly has suffered is that in some way, sexually, we haven’t been as intimate” [Richard]

"we don’t get - have much time to just be at leisure or enjoy each other’s company or things like that. You tend to just go to sleep as soon as your head hits the pillow, more or less. So, it has changed a bit in that way." [Charlie]

“I find that she’s a little bit more, kind of, irritable at times, but I don’t know whether that’s just, kind of, the fact that she’s tired or what it is, but she does - she can be quite irritable at times and I just, kind of, take that as a sign to, kind of, just give her some space and take the little one, kind of, with me for a little while and play with her or something, just to give her some, kind of, time out." [Neil]

"It’s, kind of, the same. It’s, kind of - of course, you know, there’s moments where you’re short with each other because you’re just tired." [Adrian]

Coping & support

“….obviously, with my partner A, she can only understand so much ‘cause she’s obviously taking on more of the mantle than I am. So, it’s like you don’t want to burden her with that, or you know that if she’s going to try - she can only understand to a certain point ‘cause it’s just a bit like, well, I’m going through something ten times worse, but do you know what I mean?” [Adrian]

“I think just literally, just by doing, by being chucked in the deep end and as I said, my family are based in Nottingham, so we don’t have a lot of people here, so we’ve had to do, like, loads ourselves. Well, practically everything, apart from a few visitors that come up and see you, obviously. That’s what essentially got me through it and helped me, just having to just crack on and do it.” [Ahmed]

“It’s all about trial and error, see if it works and some of the things work with her and some of the things don’t, so…” [Dev]

“I don’t know if it’s quite a - I don’t know if it’s a cultural thing, where it’s just like you try not to moan too much about things, so if you catch yourself moaning, you’re just like, oh, right, let’s move onto the next subject. My understanding, I feel like sometimes there’s no room for that, sort of, level of anxiety or that, sort of, level of, you know, questions or discomfort, what have you……I suppose, it’s just - I just think that’s how things just seem to be within society. They seem to be like you don’t - yeah, as a father it, sort of, seems like that’s not the thing here, or like - yeah, you just can’t - you just have to get on with it that, sort of, you know, just get on with it, sort of, approach to things.” [Adrian]

“You just have to - like I say, you just have to, kind of, put in coping mechanisms of mindfulness, of thinking of the girls’ future and think, well, you know, you’re doing it, you’re managing, you’re trying. It’s sometimes hard because you know you can’t communicate with them. It’s difficult, but you try your best, I guess.” [Ravi]
“Yeah, I mean, we’re trying - we’re just trying to be like a team. We’re trying to work, like, we’ll take shifts as well when we need to, so she sleeps. Like I said, she did a three, four in the morning feed, it should have been me, but I didn’t and she - I was like, okay, fine, you lie-in now, have some rest, I’ll do the next one and maybe the one after that, you just catch up, relax, get something to eat. We just - you know, I think the more you work as a team, obviously the better it is” [Ahmed]

“Yeah, yeah, we do talk about things. We try and share things and we try and find other ways of, you know, doing things.” [Jay]

“So, in my case, as I said, like, I try and go to bed early, so that I can take care of the kid between 4 to 6 o’clock when he’s awake and by that time, I get enough sleep for myself, so that I can do my day’s work, when I’m in the office.” [Jay]
“…the advice - especially, with us with twins, what we found a lot of the time was it’s always orientate - in many of the things, it’s always orientated around single birth. So, therefore, nothing - even from an advice, even from other family and friends, where they come from, they’ve had a single child, they can advise you with what they did with a single child, but when you’ve got two children with slightly different personalities and different timings, etc., you’re getting a different dimension and different parameters coming into the equation, making it more complicated.” [Ravi]

“We probably rely more on friends for moral support. So, the friends don’t do practical stuff for the baby, they just remind us that there’s a world out there, and we like to get out and see them as much as possible and not just sit at home and wait for them to come to us.” [David]

“Yeah, and it’s, kind of, like, “Ah, what’s your son being doing this week?” “He’s learnt to crawl,” or, “He’s learnt to, kind of, do this.” It’s not, kind of, like, “Oh, how are you feeling?” or that type of thing, no” [Neil]

“It’s not really, like, a lad’s - none of my friends have bab - one of my friends has just had a baby, but I don’t think anyone would really get it.” [Sam]

Health professionals & services: experience, provision & support
Experience

"I think the Social Services or, I don't know, medical services, they are focused in women, basically, you know, because it's you are who is going through that. So, okay, yeah, and parents we are important, in terms of a support, all those things, but yeah, we are second - we are not priorities in this process, you know." [Miguel]

"Since the birth, it's been pretty much all mum. So, it's been baby and mum, obviously." [Sanjay]

"…they spoke to my wife and then, kind of, did the measurements of the baby, and took prick tests, and things like that that they needed to do. But it was, kind of, very - little involvement from myself and sometimes they were just, kind of - often just, kind of, sit on this side of the room or the other side of the room and I'd be just, kind of, somewhere else, just leaving them to it" [Neil]

"it was mostly about training my wife on breastfeeding and things. So, it was nothing about me …." [Ali]

"They would never be how are you ...well, they're like, "How are you?" but just it never - it would be how am I just generally, rather than, like, how are you with this situation? And I don't think I would've ever said otherwise, 'cause you're also conscious, wow, what R's been through and the baby, you know, it's nothing in comparison" [Sam]

"I wouldn't think - if a Midwife never asked me, oh, how I'm feeling, I wouldn't think anything of it. I guess, not, like - I don't know. Like, I wouldn't be, like offended, but, oh, she doesn't care about me or anything. I wouldn't think like that." [Arjun]

Provision & support

"I would like to be here and what is the setup for us in here?" And they said, "Oh, this is the chair there for you," which was like, "Okay, fair enough, okay," and I said, "is there anything else, is there like a blanket or anything?" "Oh, well, not really, we'll have to see what we can get." [Adrian]

"if it was something that I didn't think I could talk to her about, then maybe I would consider going to the GP" [Sanjay].

Barriers to accessing support

"I don't think there's enough provision of information and suchlike support, whatever, for new fathers. But then, I would question if that is the only way I was meant to get support, was by going to one of those sessions. That's possibly not sufficient." [Simon]

"Well, no one's - I mean, no one's checked in with me, to see if I am okay. No one's had a conversation. No one, you know, at the very least, like someone might want to phone me up and say, "Is everything okay? Do you want to come and talk to anyone?" [Simon]

".. it didn't feel like they were creating the opportunity for those kinds of issues to be raised, because you need a basic level of trust to raise mental health issues with a professional." [David]

"Just it's funny, it's a bit of a weird one, it's like sometimes you, sort of, go to - say, like, I went - when I did pop down to the health centre to drop off the red book, I was the only dad there, type of thing. There was, like, maybe ten mums and you, sort of, walk in and everyone is going, "Who's - what's this?" and so it can feel a little bit like - not that you're not welcome, but just obviously, just statistically, there's bound to be, sort of - it's - it can feel a little bit weird. Never un - never, sort of, feel awkward or anything, but, you know, you do, sort of, think, oh God, I wish there were some other dads here... just generally that sort of thing really just to - just sometimes it can, sort of, feel a little bit, sort of, strange, as a bloke, going into that, sort of, environment." [Tom]

"it feels like culturally, it's like you can't talk too negatively about things because, for a lot of people, it sounds negative rather than it sounds like I'm just talking about an experience." [Adrian]

"There's probably a -I mean, there's probably a bit of a, sort of, I don't know what the word is, kind of a, it's a sort of, a self-imposed barrier for men who tend probably not to look for those services as much." [Charlie]

Men's perceived needs: what fathers want

Better preparation for fatherhood

"….what they would expect from me, as a birth partner, what I have the right to expect from them, and what kinds of communication they would find helpful, 'cause I think once you get in and your partner is in pain and you're trying to get through the process and get yourself into a bed as quickly as possible, just knowing what I can do and what I have a right to ask for and what actually, I can't do, would be very helpful." [David]

"I think what you really need to be - there needs to be more of a day one to five course". [Ravi]

"..if we had something, like, for what signs to look out for in certain situations, I think that would have helped" [Arjun]

"…about the types of things that go wrong and what you may need to do, kind of, as a dad to, kind of, support your wife (with breastfeeding)" [Neil]

"…maybe you can make antenatal classes more specific or have separate classes for dads" [Ahmed].

Better access to information & services

"…when the Health Visitors visit us, maybe they should say, "It would be better if the father is also at home," and maybe they can ask the fathers on, how is it going and, I mean, what is their involvement in taking care of the baby, and maybe they can give some suggestions there…." [Ali]

"I guess it would be the same as how the mothers are supported I would say, 'cause obviously, we're in it with them. Obviously, it's different, but I'd say that similar questions and similar follow-ups, and that sort of thing ….." [Akash]

"…practical information for, kind of, dads and then, kind of, having information, which say, "Well, you may feel like this, this and this and this may be, kind of, trigger points at which you may want to, kind of, talk to somebody about it to, kind of, relieve some of your stress," or something like that." [Neil]

"I think there are times when it would be useful to have some questions for fathers on the checklist, particularly if you're worried about postnatal depression…" [David]

"I guess, 'cause my wife was always there, talking about it in front of her may have made it, kind of, seem that I didn't want to be involved or was having, kind of, issues and things like that. So, I probably wouldn't have, but definitely having, kind of, like a pamphlet that I could have called independently, while I was at work or something like that, would have helped." [Neil]

"I think, yeah, I mean, it would, I'm not sure how much I would say, to be honest 'cause it just still - it still feels quite foreign for people to ask how the father is. So, I'd probably just say, "Yeah, it's going well, I'm fine," [Akash]

A variety of sources of support throughout the perinatal period

"I think the more, sort of, personalised the contact, probably the better. I don't feel like there's any shortage of information out there if I want to go and look for it. It's more like yeah, that kind of personal contact, I think." [Charlie]

“I mean, I think a face to face contact would be great. I obviously understand there are sort of limited resources, but that would be - to my mind, that would be ideal.” [Simon]

“I don’t have time to, like, read, like, big, like, leaflets or big documents or anything. I think it just needs to be, like, something concise and punchy” [Arjun]

“I think it would be good to have these, kind of, classes for like - for fathers who are becoming fathers and, kind of, the experience they would have as a father, you know, and maybe, you know, somebody who’s, kind of, been there and done it and talk about the experience that you’ll go through, so you know, at the end of the day, it’s not something - it’s not like something where you go, “Oh, here you go, you can have it and you look after it.” It’s more, you know, getting involved, understanding the life changes you’re going to have, and I think a lot of people - you know, if you look out there, a lot of people don’t - they’re all excited to have babies. “Oh yeah, I want a baby. I want a baby,” but they don’t understand the emotions, the stress, the financial side of it, you know, at the end of the day, you know, I think that a lot of people don’t, kind of - they understand that afterwards and that’s when things hit…..” [Krish]

“I think information should be given right from when you know the women are pregnant. But then, those information should be given as per the stages.” [Jay]

“…so I think around week two or three is when the sleep deprivation starts to get you down, particularly, if you have to go back to work, one of you has to go back to work, that I think is the, kind of - the period when it could all start falling apart if you didn't have the support network.” [David]

APPENDIX - 20

TIDieR
Template for Intervention Description and Replication

The TIDieR (Template for Intervention Description and Replication) Checklist*:

Information to include when describing an intervention and the location of the information

Item number	Item	Where located **	
		Primary paper (page or appendix number)	Other † (details)
	BRIEF NAME		
1.	Provide the name or a phrase that describes the intervention.	Promotional Guide system p29 -33	
	WHY		
2.	Describe any rationale, theory, or goal of the elements essential to the intervention.	p78-83	
	WHAT		
3.	Materials: Describe any physical or informational materials used in the intervention, including those provided to participants or used in intervention delivery or in training of intervention providers. Provide information on where the materials can be accessed (e.g. online appendix, URL).	p220-239	
4.	Procedures: Describe each of the procedures, activities, and/or processes used in the intervention, including any enabling or support activities.	p29-33, 220-239	
	WHO PROVIDED		

5.	For each category of intervention provider (e.g. psychologist, nursing assistant), describe their expertise, background and any specific training given.	Health visitor trained to use PG p238-239	
	HOW		
6.	Describe the modes of delivery (e.g. face-to-face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group.	Face-to-face on a one to one basis, p29	
	WHERE		
7.	Describe the type(s) of location(s) where the intervention occurred, including any necessary infrastructure or relevant features.	At home or in clinic, p29	
	WHEN and HOW MUCH		
8.	Describe the number of times the intervention was delivered and over what period of time including the number of sessions, their schedule, and their duration, intensity or dose.	Antenatal & Postnatal p-29	
	TAILORING		
9.	If the intervention was planned to be personalised, titrated or adapted, then describe what, why, when, and how.	Topic cards are chosen by parents p220-223	Parent-led intervention
	MODIFICATIONS		
10.‡	If the intervention was modified during the course of the study, describe the changes (what, why, when, and how).	N/A	

	HOW WELL		
11.	Planned: If intervention adherence or fidelity was assessed, describe how and by whom, and if any strategies were used to maintain or improve fidelity, describe them.	Assessed by researcher p250-252, 303-318	See Chapter 7
12.‡	Actual: If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.	Some programme material not used such as Strengths & Needs Questionnaire and Family Map. p310-312	See section 7.4.4

** **Authors** - use N/A if an item is not applicable for the intervention being described. **Reviewers** – use '?' if information about the element is not reported/not sufficiently reported.

† If the information is not provided in the primary paper, give details of where this information is available. This may include locations such as a published protocol or other published papers (provide citation details) or a website (provide the URL).

‡ If completing the TIDieR checklist for a protocol, these items are not relevant to the protocol and cannot be described until the study is complete.

* We strongly recommend using this checklist in conjunction with the TIDieR guide (see *BMJ* 2014;348:g1687) which contains an explanation and elaboration for each item.

* The focus of TIDieR is on reporting details of the intervention elements (and where relevant, comparison elements) of a study. Other elements and methodological features of studies are covered by other reporting statements and checklists and have not been duplicated as part of the TIDieR checklist. When a **randomised trial** is being reported, the TIDieR checklist should be used in conjunction with the CONSORT statement (see www.consort-statement.org) as an extension of **Item 5 of the CONSORT 2010 Statement.** When a **clinical trial protocol** is being reported, the TIDieR checklist should be used in conjunction with the SPIRIT statement as an extension of **Item 11 of the SPIRIT 2013 Statement** (see www.spirit-statement.org). For alternate study designs, TIDieR can be used in conjunction with the appropriate checklist for that study design (see www.equator-network.org).

Additional issues for consideration as suggested by Cotterill et al (2018):

'Voice' – to convey who was involved in preparing the TIDieR template: This was prepared by the researcher for the feasibility study discussed in Chapter 7 of this thesis.

- 'Stage of implementation' – Although the Promotional Guides are being implemented in both study sites, major gaps were identified through this study. See Results and Discussion sections in Chapter 7.
- 'Modification' as a new column – to remind authors to describe modifications to any item in the checklist – N/A
- 'How well' item to be extended – to encourage researchers to describe how contextual factors affected intervention delivery – N/A

APPENDIX – 21

FAMILY STRENGTHS AND NEEDS

FAMILY STRENGTHS	Tick if significant	ANTENATAL SUMMARY	1. Family Circumstances 2. Effects and Interaction 3. Parent and Professional View	FAMILY NEEDS	Tick if significant
PREGNANCY & BABY				**PREGNANCY & BABY**	
Desired/wanted	☐			Unplanned	☐
Physically uncomplicated pregnancy	☐			Physical complications in pregnancy	☐
Normal Foetal Development	☐			Premature/Small for dates/Low birth weight	☐
Healthy Infant	☐			Physical Illness/concerns in infant	☐
Responsive/warm/easy temperament	☐			Frequent crying/feeding difficulties	☐
Settles & calms	☐			Irritable temperament /difficult to settle	☐
Breast-feeding/feeding pattern established	☐			Unclear/inconsistent feeding	☐
PARENT–BABY RELATIONSHIP/PARENTING				**PARENT–BABY RELATIONSHIP/PARENTING**	
Warm loving bond	☐			Negative/absent feeling/bond	☐
Sensitive nurture, care and protection	☐			Lack of protection/harsh parenting	☐
Realistic/accurate expectations	☐			Unrealistic/negative expectations	☐
Adequate parental confidence/efficacy/esteem	☐			Low parental confidence/efficacy/esteem	☐
Sensitive, reciprocal interaction and stimulation	☐			Communication & interaction problems/Lack of stimulation	☐
Positive ideas/beliefs about baby	☐			Negative/absent ideas about baby	☐
FAMILY & FRIENDS				**PARENTS & FAMILY**	
Healthy behaviours, e.g. Diet, non-smoking, alcohol	☐			Unhealthy behaviours e.g. smoking, poor diet	☐
Positive wellbeing & mental health	☐			Stress/mental health problems	☐
Good physical health/development/capacity	☐			Physical illness/chronic disability/learning disability	☐
Supportive, caring couple relationship	☐			Alcohol/substance misuse	☐
Emotional family & social support	☐			Relationship conflict/violence	☐
Available practical family & social support	☐			Lack of confiding relationship	☐
Stable family environment	☐			Lack of practical support	☐
Strong, positive family values & sense of purpose	☐			Stressful/unstable family environment	☐
Strong cultural/religious traditions	☐			Parental criminality/antisocial behaviour/family values	☐
Smaller family size/More than 2 years between siblings	☐			Young parents/large family (4+)/lone parent	☐
Positive coping & problem solving skills	☐			Unsuccessful coping/problem-solving	☐
Positive service engagement and use	☐			Service non-engagement/avoidance/hostility	☐
LIFE EVENTS				**LIFE EVENTS**	
Loving, supportive childhood	☐			Childhood adversity	☐
Absence/Resolution of previous abuse/neglect	☐			Past physical, sexual or emotional abuse	☐
Adaptation to trauma/life events	☐			Major recent traumatic events	☐
Educational attainment	☐			Low educational attainment	☐
NEIGHBOURHOOD & COMMUNITY				**NEIGHBOURHOOD & COMMUNITY**	
Economic security	☐			Material deprivation & financial problems	☐
Job security	☐			Insecure work/unemployment	☐
Secure, adequate housing	☐			Housing problems/overcrowding	☐
Strong cultural identity and ethnic pride	☐			Cultural & ethnic isolation	☐
Strong bonds/involvement in local community	☐			Fragmented/poor community ties	☐
Caring, mutually supportive community	☐			Neighbourhood threat	☐
Access to effective support services	☐			Poor quality/ineffective support services	☐
OTHER				**OTHER**	
Other, please specify	☐			**Other, please specify**	☐

FAMILY STRENGTHS AND NEEDS

FAMILY STRENGTHS	Tick if significant	POSTNATAL SUMMARY	1. Family Circumstances 2. Effects and Interaction 3. Parent and Professional View	FAMILY NEEDS	Tick if significant
PREGNANCY & BABY				**PREGNANCY & BABY**	
Desired/wanted	☐			Unplanned	☐
Physically uncomplicated recovery	☐			Physical complications in recovery	☐
Normal Development	☐			Premature/Small for dates/Low birth weight	☐
Healthy Infant	☐			Physical Illness/concerns in infant	☐
Responsive/warm/easy temperament	☐			Frequent crying/feeding difficulties	☐
Settles & calms	☐			Irritable temperament /difficult to settle	☐
Breast-feeding/feeding pattern established	☐			Unclear/inconsistent feeding	☐
PARENT–BABY RELATIONSHIP/PARENTING				**PARENT–BABY RELATIONSHIP/PARENTING**	
Warm loving bond	☐			Negative/absent feeling/bond	☐
Sensitive nurture, care and protection	☐			Lack of protection/harsh parenting	☐
Realistic/accurate expectations	☐			Unrealistic/negative expectations	☐
Adequate parental confidence/efficacy/esteem	☐			Low parental confidence/efficacy/esteem	☐
Sensitive, reciprocal interaction and stimulation	☐			Communication & interaction problems/Lack of stimulation	☐
Positive ideas/beliefs about baby	☐			Negative/absent ideas about baby	☐
FAMILY & FRIENDS				**PARENTS & FAMILY**	
Healthy behaviours, e.g. Diet, non-smoking, alcohol	☐			Unhealthy behaviours e.g. smoking, poor diet	☐
Positive wellbeing & mental health	☐			Stress/mental health problems	☐
Good physical health/development/capacity	☐			Physical illness/chronic disability/learning disability	☐
Supportive, caring couple relationship	☐			Alcohol/substance misuse	☐
Emotional family & social support	☐			Relationship conflict/violence	☐
Available practical family & social support	☐			Lack of confiding relationship	☐
Stable family environment	☐			Lack of practical support	☐
Strong, positive family values & sense of purpose	☐			Stressful/unstable family environment	☐
Strong cultural/religious traditions	☐			Parental criminality/antisocial behaviour/family values	☐
Smaller family size/More than 2 years between siblings	☐			Young parents/large family (4+)/lone parent	☐
Positive coping & problem solving skills	☐			Unsuccessful coping/problem-solving	☐
Positive service engagement and use	☐			Service non-engagement/avoidance/hostility	☐
LIFE EVENTS				**LIFE EVENTS**	
Loving, supportive childhood	☐			Childhood adversity	☐
Absence/Resolution of previous abuse/neglect	☐			Past physical, sexual or emotional abuse	☐
Adaptation to trauma/life events	☐			Major recent traumatic events	☐
Educational attainment	☐			Low educational attainment	☐
NEIGHBOURHOOD & COMMUNITY				**NEIGHBOURHOOD & COMMUNITY**	
Economic security	☐			Material deprivation & financial problems	☐
Job security	☐			Insecure work/unemployment	☐
Secure, adequate housing	☐			Housing problems/overcrowding	☐
Strong cultural identity and ethnic pride	☐			Cultural & ethnic isolation	☐
Strong bonds/involvement in local community	☐			Fragmented/poor community ties	☐
Caring, mutually supportive community	☐			Neighbourhood threat	☐
Access to effective support services	☐			Poor quality/ineffective support services	☐
OTHER				**OTHER**	
Other, please specify	☐			**Other, please specify**	☐

APPENDIX – 22

The Social Ecological Model

Source: Bronfenbrenner (1977)

APPENDIX -23

Calling New Fathers!

Are you expecting your first baby?

Would you be willing to just complete two ONLINE QUESTIONNAIRES to help other first-time dads?

Although fathers are on the front line when their babies are born, the health service and policies often overlook them. For this to change, fathers' voices need to be heard!

WHAT WE WANT FROM YOU: ask you to complete two online questionnaires (one before the birth of your baby and one after the birth), about your thoughts, feelings and views about becoming a dad.

WHAT WE'LL GIVE TO YOU: the chance to tell it 'like it is', THINK about what happened, and influence the Health Service going forward . . . PLUS a £25 gift voucher!

To take part or find out more please visit www.newdadstudy.com OR contact Sharin Baldwin on 07956581635 or sharin.1.baldwin@kcl.ac.uk

Sharin Baldwin is funded by a NIHR Clinical Doctoral Fellowship, ICA-CDRF-2015-01-031.

APPENDIX – 24

Invitation Letter for Health Visitors (Phase – 3)

NEW DAD STUDY

King's College London
Florence Nightingale Faculty of Nursing and Midwifery
James Clerk Maxwell Building
57 Waterloo Road, London SE1 8WA
sharin.1.baldwin@kcl.ac.uk
T: 07956581635

Dear Health Visitors,

I am currently undertaking a research study as part of a Clinical Doctoral Fellowship at King's College London, funded by the National Institute for Health Research. As part of this study I am exploring how best to support men as they become fathers for the first time, with a particular focus on how we can better support their mental health and wellbeing. The study involves testing the feasibility and acceptability of the Promotional Guide System on fathers, and as part of this, I would like to find out about your views of this intervention. Findings from this study will help shape services to meet the needs of fathers during this period.

I am looking for volunteers from health visitors within London North West Healthcare Trust and Guy's and St. Thomas' NHS Foundation Trust to take part in either a one-off interview, or an observation of the Promotional Guide visit in practice, arranged at a time to suit you. Please find more details of the study in the participant information sheet (attached). If you would like to participate in the study or would like more information, please contact me using the details above.

For taking part in the study, in appreciation of your contributions and your time, you will be offered you a £25 gift voucher.

I look forward to hearing from you soon.

Yours Sincerely
Sharin Baldwin RN, RM, RHV, QN, FiHV, BSc (Hons), PG Dip, MSc

Sharin Baldwin is funded by a National Institute for Health Research (NIHR) Clinical Doctoral Fellowship, ICA-CDRF-2015-01-031.

APPENDIX - 25

NEW DAD STUDY

Antenatal Questionnaire

Many thanks for agreeing to take part in our study which is trying to find out how best to support men as they become fathers for the first time. We would like to find out a little more about you, your health, and your thoughts and feelings during this time.

Most of the questions can be answered with a 'tick (✓)' and some questions which allow you to provide more detailed answers. If you have any questions about any of the sections in the questionnaire, please contact Sharin Baldwin on 07956581635 or email: sharin.1.baldwin@kcl.ac.uk.

Eligibility questions:

1) **Are you expecting to become a father for the first time?**

☐ **Yes** *(continue)*

☐ **No** *(Thank you very much for your interest in taking part in this study but unfortunately you do not meet the required criteria)*

2) **Do you live in the London Boroughs of Brent, Harrow, Ealing, Lambeth or Southwark?**

☐ **Yes** *(continue)*

☐ **No** *(Thank you very much for your interest in taking part in this study but unfortunately you do not meet the required criteria)*

1) **Are you currently suffering from any mental illness, such as schizophrenia, anxiety, personality disorders, depression or bipolar disorder?**

☐ **Yes** *(Thank you very much for your interest in taking part in this study but unfortunately you do not meet the required criteria, you may however find the 'useful resources' section helpful at the end of the questionnaire, page – 15).*

☐ **No** *(continue)*

2) **Every family in England with a child under the age of 5 years should have an allocated health visitor. They usually arrange a contact with parents before the birth of the baby around 28-32 weeks of pregnancy and then again between 10-14 days after the birth.**

Have you or your partner received a visit from your health visitor (you should have received a contact when your partner was around 28-32 weeks pregnant)?

☐ **Yes** *(continue)*

☐ **No** *(Thank you very much for your interest in taking part in this study but unfortunately you do not meet the required criteria)*

What is today's date? Date / Month / 20….

Section 1: Some questions about you

We would like to know about your health and lifestyle at the current time.

1. What is your age group:

☐ 16 to 19 years of age
☐ 20-24 years of age
☐ 25-29 years of age
☐ 30-34 years of age
☐ 35-39 years of age
☐ 40-44 years of age
☐ 45-49 years of age
☐ 50-54 years of age
☐ 55-59 years of age
☐ Over 60 years of age

2. How do you describe the ethnic group to which you belong? Please tick below

White	*Black African/Caribbean or Black British*	*Asian / Asian British*	*Mixed / Multiple ethnic groups*	*Other Ethnic Groups*
☐ English ☐ Welsh ☐ Scottish ☐ N. Irish ☐ British ☐ Irish ☐ Traveller ☐ Gypsy / Romany ☐ Any white other (describe)	☐ Black British ☐ Caribbean ☐ African ☐ Other Black other / African / Caribbean (describe) _____ _____ _____ _____ ____	☐ Indian ☐ Pakistani ☐ Bangladeshi ☐ Chinese ☐ Any other Asian (describe) _____ _____ _____ _____ _____ _____	☐ White and Black Caribbean ☐ White and Black African ☐ White and Asian ☐ Any other mixed / multiple ethnic (describe) _____ _____	☐ Arab ☐ Any other ethnic group (describe) _____ _____ _____ _____ _____ _____ _____ _____

3. How do you describe your religion?

☐ Christian (all denominations)
☐ Buddhist
☐ Hindu
☐ Muslim
☐ Sikh
☐ No religion
☐ Jewish
☐ Other religion (please say what)
……

4. Is English your first language?

☐ Yes ☐ No
If no, what is your first language? ……..

5. What is your current employment status?

☐ Full-time paid work, working
☐ Part-time paid work, working
☐ Voluntary Job
(specify)……
☐ Student
☐ Unemployed
☐ Other

6. What is your total income per year?

☐ £0 - £5475 ☐ £5476 - £15,000 ☐ £15, 000 – £30, 000
☐ £31,000 - £45,000 ☐ £46,000 - £60,000 ☐ £61,000-more
☐ Would rather not say

7. Could you please tell us the highest educational qualification you have gained?

☐ None ☐ GCSE level ☐ A Level or equivalent ☐ Degree or equivalent
☐ Master's or Doctorate ☐ Other (specify)……

8. Are you and your baby's mother living together?

☐ Yes ☐ No

9. What is your relationship to your baby's mother?

☐ Married ☐ Not in a couple relationship
☐ In a couple relationship ☐ Friends ☐ Other (specify)……

<u>Section 2:</u> This section is about your general health. Under each heading, please tick the ONE box that best describes your health TODAY.

1. MOBILITY

I have no problems in walking about ☐
I have slight problems in walking about ☐
I have moderate problems in walking about ☐
I have severe problems in walking about ☐
I am unable to walk about ☐

2. SELF-CARE

I have no problems washing or dressing myself ☐
I have slight problems washing or dressing myself ☐
I have moderate problems washing or dressing myself ☐
I have severe problems washing or dressing myself ☐
I am unable to wash or dress myself ☐

3. USUAL ACTIVITIES *(e.g. work, study, housework, family or leisure activities)*

I have no problems doing my usual activities ☐
I have slight problems doing my usual activities ☐
I have moderate problems doing my usual activities ☐
I have severe problems doing my usual activities ☐
I am unable to do my usual activities ☐

4. PAIN / DISCOMFORT

I have no pain or discomfort ☐
I have slight pain or discomfort ☐
I have moderate pain or discomfort ☐
I have severe pain or discomfort ☐
I have extreme pain or discomfort ☐

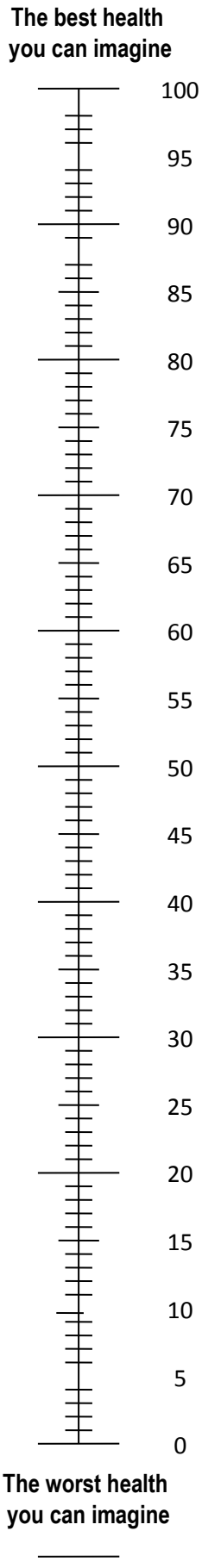
5. ANXIETY / DEPRESSION

I am not anxious or depressed ☐
I am slightly anxious or depressed ☐
I am moderately anxious or depressed ☐
I am severely anxious or depressed ☐
I am extremely anxious or depressed ☐

We would like to know how good or bad your health is TODAY.

- This scale is numbered from 0 to 100.
- 100 means the best health you can imagine.
- 0 means the worst health you can imagine.
- Mark an X on the scale to indicate how your health is TODAY.
- Now, please write the number you marked on the scale in the box below.

YOUR HEALTH TODAY = ☐



<u>Section 3:</u> If you are in any kind of couple relationship with your baby's mothers then please complete the following questions, otherwise please go directly to section 4.

1. **Please indicate the degree of happiness, all things considered, of your relationship**.

   ☐ Extremely Unhappy
   ☐ Fairly Unhappy
   ☐ A Little Unhappy
   ☐ Happy
   ☐ Very Happy
   ☐ Extremely Happy
   ☐ Perfect

2. **In general, how often do you think that things between you and your partner are going well?**

   ☐ All the Time
   ☐ Most of the Time
   ☐ More often than Not
   ☐ Occasionally
   ☐ Rarely
   ☐ Never

3. **Our relationship is strong**

   ☐ Not at all True
   ☐ A little True
   ☐ Somewhat True
   ☐ Mostly True
   ☐ Almost Completely True
   ☐ Completely True

4. **My relationship with my partner makes me happy**

   ☐ Not at all True
   ☐ A little True
   ☐ Somewhat True
   ☐ Mostly True
   ☐ Almost Completely True
   ☐ Completely True

5. **I have a warm and comfortable relationship with my partner**

   ☐ Not at all True
   ☐ A little True
   ☐ Somewhat True
   ☐ Mostly True
   ☐ Almost Completely True
   ☐ Completely True

6. **I really feel like part of a team with my partner**

   ☐ Not at all True
   ☐ A little True
   ☐ Somewhat True
   ☐ Mostly True
   ☐ Almost Completely True
   ☐ Completely True

7. How rewarding is your relationship with your partner?

- ☐ Not at All
- ☐ A little
- ☐ Somewhat
- ☐ Mostly
- ☐ Almost completely
- ☐ Completely

8. How well does your partner meet your needs?

- ☐ Not at All
- ☐ A little
- ☐ Somewhat
- ☐ Mostly
- ☐ Almost completely
- ☐ Completely

9. To what extent has your relationship met your original expectations?

- ☐ Not at All
- ☐ A little
- ☐ Somewhat
- ☐ Mostly
- ☐ Almost completely
- ☐ Completely

10. In general, how satisfied are you with your relationship?

- ☐ Not at All
- ☐ A little
- ☐ Somewhat
- ☐ Mostly
- ☐ Almost completely
- ☐ Completely

For each of the following items, select the answer that best describes how you feel about your relationship. Base your responses on your first impressions and immediate feelings about the item.

11. INTERESTING	**5**	**4**	**3**	**2**	**1**	**0**	**BORING**
12. BAD	**0**	**1**	**2**	**3**	**4**	**5**	**GOOD**
13. FULL	**5**	**4**	**3**	**2**	**1**	**0**	**EMPTY**
14. STURDY	**5**	**4**	**3**	**2**	**1**	**0**	**FRAGILE**
15. DISCOURAGING	**0**	**1**	**2**	**3**	**4**	**5**	**HOPEFUL**
16. ENJOYABLE	**5**	**4**	**3**	**2**	**1**	**0**	**MISERABLE**

Funk, J. L. & Rogge, R. D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. Journal of Family Psychology, 21, 572-583

Section 4: Some questions about the support you have around you

We are interested in how you feel about the following statements. Please read each statement carefully and indicate how you feel about each statement.

1. There is a special person who is around when I am in need.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

2. There is a special person with whom I can share joys and sorrows.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

3. My family really tries to help me.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

4. I get the emotional help & support I need from my family.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

5. I have a special person who is a real source of comfort to me.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

6. My friends really try to help me.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree

☐ Neutral
☐ Mildly Agree
☐ Strongly Agree
☐ Very Strongly Agree

7. I can count on my friends when things go wrong.

☐ Very Strongly Disagree
☐ Strongly Disagree
☐ Mildly Disagree
☐ Neutral
☐ Mildly Agree
☐ Strongly Agree
☐ Very Strongly Agree

8. I can talk about my problems with my family.

☐ Very Strongly Disagree
☐ Strongly Disagree
☐ Mildly Disagree
☐ Neutral
☐ Mildly Agree
☐ Strongly Agree
☐ Very Strongly Agree

9. I have friends with whom I can share my joys and sorrows.

☐ Very Strongly Disagree
☐ Strongly Disagree
☐ Mildly Disagree
☐ Neutral
☐ Mildly Agree
☐ Strongly Agree
☐ Very Strongly Agree

10. There is a special person in my life who cares about my feelings.

☐ Very Strongly Disagree
☐ Strongly Disagree
☐ Mildly Disagree
☐ Neutral
☐ Mildly Agree
☐ Strongly Agree
☐ Very Strongly Agree

11. My family is willing to help me make decisions.

☐ Very Strongly Disagree
☐ Strongly Disagree
☐ Mildly Disagree
☐ Neutral
☐ Mildly Agree
☐ Strongly Agree
☐ Very Strongly Agree

12. I can talk about my problems with my friends.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment 1988;52:30-41.

Section 5: Some questions about your mental wellbeing

Below are some statements about your current feelings and thoughts.
Please tick the box that best describes your experience of each over the **last 2 weeks**.

1. I've been feeling optimistic about the future

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

2. I've been feeling useful

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

3. I've been feeling relaxed

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

4. I've been dealing with problems well

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

5. I've been thinking clearly

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

6. I've been feeling close to other people

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

7. I've been able to make up my own mind about things

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

Section 6: Some questions about feelings and experiences

For the following questions, please tick the box that best describes your feelings and experiences over the last **7 days**.

1. I have been able to laugh and see the funny side of things as much as I always could

- ☐ As much as I always could
- ☐ Not quite so much now
- ☐ Definitely not so much now
- ☐ Not at all

2. I have looked forward with enjoyment to things

- ☐ As much as I ever did
- ☐ Rather less than I used to
- ☐ Definitely less than I used to
- ☐ Hardly at all

3. I have blamed myself unnecessarily when things went wrong

- ☐ Yes, most of the time
- ☐ Yes, some of the time
- ☐ Not very often
- ☐ No, never

4. I have been anxious or worried for no good reasons

- ☐ No, not at all.
- ☐ Hardly, ever
- ☐ Yes, sometimes
- ☐ Yes, very often

5. I have felt scared or panicky for no very good reason

- ☐ Yes, quite a lot
- ☐ Yes, sometimes
- ☐ No, not much
- ☐ No, not at all

6. **Things have been getting on top of me**

- ☐ Yes, most of the time I haven't been able to cope at all
- ☐ Yes, sometimes I haven't been coping as well as usual
- ☐ No, most of the time I have coped quite will
- ☐ No, I have been coping as well as ever

7. **I have been so unhappy that I have had difficulty sleeping**

- ☐ Yes, most of the time
- ☐ Yes, sometimes
- ☐ Not very often
- ☐ No, not at all

8. **I have felt sad or miserable**

- ☐ Yes, most of the time
- ☐ Yes, quite often
- ☐ Not very often
- ☐ No, not at all

9. **I have been so unhappy that I have been crying**

- ☐ Yes, most of the time
- ☐ Yes, quite often
- ☐ Only occasionally
- ☐ No, not at all

10. **The thought of harming myself has occurred to me**

- ☐ Yes, quite often
- ☐ Sometimes
- ☐ Hardly ever
- ☐ Never

[1]*Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. British Journal of Psychiatry 150:782-786.*

[2]*Source: K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199*

Section 7: Over the last 2 weeks, how often have you been bothered by any of the following problems?

1. **Feeling nervous, anxious or on edge**

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

2. **Not being able to stop or control worrying**

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

3. Worrying too much about different things

☐ Not at all
☐ Several days
☐ More than half the day
☐ Nearly every day

4. Trouble relaxing

☐ Not at all
☐ Several days
☐ More than half the day
☐ Nearly every day

5. Being so restless that it is hard to sit still

☐ Not at all
☐ Several days
☐ More than half the day
☐ Nearly every day

6. Becoming easily annoyed or irritable

☐ Not at all
☐ Several days
☐ More than half the day
☐ Nearly every day

7. Feeling afraid as if something awful might happen

☐ Not at all
☐ Several days
☐ More than half the day
☐ Nearly every day

The GAD-7 originates from Spitzer RL, Kroenke K, Williams JB, et al; A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006 May 22;166(10):1092-7. GAD-7 © Pfizer Inc. all rights reserved; used with permission.

As you are now about to become a father, your answers to some of these questions may show that you are feeling very low and would benefit from talking to a health professional.

If this is the case, please tick this box if you would like us to let you know ☐

***Please write your contact details including phone number here**:*
What is the expected delivery date for your baby: Date / Month / 20…..

What is your postcode:

Do you have any comments you would like to make about your health and well-being at present?

Positive

.....
.....
.....
.....
.....
.....

Negative

.....
.....
.....
.....
.....
.....

This is the end of the questionnaire, thank you very much for completing it.

Please fill in the date you completed the questionnaire Date / Month / 20……

Please return it in the FREEPOST envelope which is enclosed or email to sharin.1.baldwin@kcl.ac.uk

Please tick this box if you wish to receive a copy of the results when the study is completed ☐

If you have any worries about your health and wellbeing then you should make an appointment to see your GP or call NHS 111. They can help you and offer some form of support or treatment. Here are some useful links for more information that may help and telephone numbers for useful helplines for fathers:

- http://www.nhs.uk/conditions/postnataldepression/pages/introduction.aspx
- http://www.nhs.uk/Conditions/stress-anxiety-depression/Pages/improve-mental-wellbeing.aspx
- http://www.nhs.uk/Conditions/stress-anxiety-depression/Pages/dealing-with-depression.aspx

Helplines:

- Anxiety UK: 08444 775 774
- Families Need Fathers (FNF): 0300 0300 063
- Mind: 0300 123 3393
- PANDAS Pre and postnatal depression advice and support: 0843 289 8401

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NHS
National Institute for Health Research

APPENDIX - 26

NEW DAD STUDY

Postnatal Questionnaire

To be completed 2-3 months after your baby's birth

Many thanks for agreeing to take part in our study which is trying to find out how best to support men as they become fathers for the first time. We would like to follow up on how you are feeling about your health and about the support you have received from your health visitor since having your baby.

Most of the questions can be answered with a 'tick (✓)' and some questions which allow you to provide more detailed answers. If you have any questions about any of the sections in the questionnaire, please contact Sharin Baldwin on 07956581635 or email: sharin.1.baldwin@kcl.ac.uk.

Eligibility questions:

1) Are you still living in the London Boroughs of Brent, Harrow, Ealing, Lambeth or Southwark?

☐ **Yes** *(continue)*

☐ **No** *(Thank you very much for your interest in taking part in this study but unfortunately you do not meet the required criteria)*

2) Are you currently suffering from or have been diagnosed with a mental illness since your partner's pregnancy, such as schizophrenia, anxiety, personality disorders, depression or bipolar disorder?

☐ **Yes** *(Thank you very much for your interest in taking part in this study but unfortunately you do not meet the required criteria, you may however find the 'useful resources' section helpful at the end of the questionnaire, page – 17).*

☐ **No** *(continue)*

3) Has your partner recently given birth to a healthy baby?

☐ **Yes** *(continue)*

☐ **No** *(Thank you very much for your interest in taking part in this study but unfortunately you do not meet the required criteria)*

4) Is your baby well at present?

☐ **Yes** *(continue)*

☐ **No** Please provide further details **…….**

If you have answered 'No' to questions 3 and 4 you may benefit from talking to a health professional. If you are happy for us to contact you then please provide your contact details including phone number here:

Name: **Address:**

Phone number: **Email address:**

Section 1: Some questions about you

We would like to know about your health and lifestyle at the current time.

10. What is today's date? Date / Month / **20….**

11. What was the date of your child's birth? Date / Month / **20…..**

12. Have there been any changes to your employment status since you completed the last questionnaire?

☐ Yes ☐ No

If yes, please give details……..
……
……

13. Have there been any changes to your household income since you completed the last questionnaire?

☐ Yes ☐ No

If yes, please give details……..
……
……

14. Are you and your baby's mother living together?

☐ Yes ☐ No

15. How involved are you in caring for your baby?

☐ Provide majority of the care ☐ Equally share care with partner
☐ Provide some care ☐ Not involved in providing any care
☐ Other (please specify)……

16. What is your relationship to your baby's mother?

☐ Married ☐ Not in a couple relationship
☐ In a couple relationship ☐ Friends
☐ Other (please specify)……

<u>Section 2:</u> This section is about your general health. Under each heading, please tick the ONE box that best describes your health TODAY.

6. MOBILITY

- I have no problems in walking about ☐
- I have slight problems in walking about ☐
- I have moderate problems in walking about ☐
- I have severe problems in walking about ☐
- I am unable to walk about ☐

7. SELF-CARE

- I have no problems washing or dressing myself ☐
- I have slight problems washing or dressing myself ☐
- I have moderate problems washing or dressing myself ☐
- I have severe problems washing or dressing myself ☐
- I am unable to wash or dress myself ☐

8. USUAL ACTIVITIES *(e.g. work, study, housework, family or leisure activities)*

- I have no problems doing my usual activities ☐
- I have slight problems doing my usual activities ☐
- I have moderate problems doing my usual activities ☐
- I have severe problems doing my usual activities ☐
- I am unable to do my usual activities ☐

9. PAIN / DISCOMFORT

- I have no pain or discomfort ☐
- I have slight pain or discomfort ☐
- I have moderate pain or discomfort ☐
- I have severe pain or discomfort ☐
- I have extreme pain or discomfort ☐

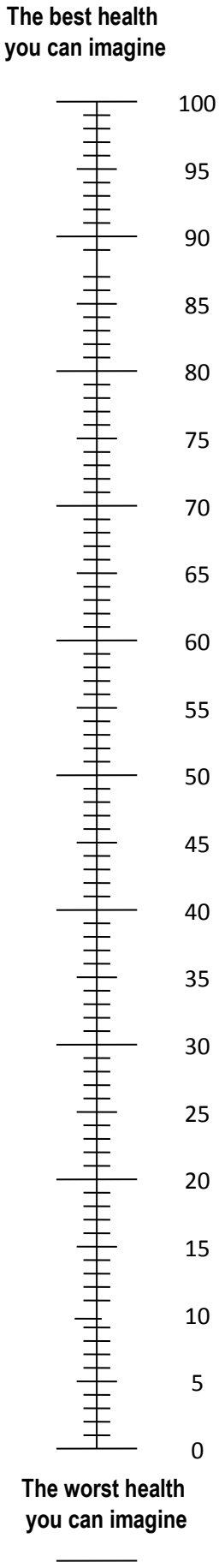
10. ANXIETY / DEPRESSION

- I am not anxious or depressed ☐
- I am slightly anxious or depressed ☐
- I am moderately anxious or depressed ☐
- I am severely anxious or depressed ☐
- I am extremely anxious or depressed ☐

We would like to know how good or bad your health is TODAY.

- This scale is numbered from 0 to 100.
- 100 means the <u>best</u> health you can imagine.
- 0 means the <u>worst</u> health you can imagine.
- Mark an X on the scale to indicate how your health is TODAY.
- Now, please write the number you marked on the scale in the box below.

YOUR HEALTH TODAY = ☐



<u>Section 3:</u> If you are in any kind of couple relationship with your baby's mothers then please complete the following questions, otherwise please go directly to section 4.

17. Please indicate the degree of happiness, all things considered, of your relationship.

- ☐ Extremely Unhappy
- ☐ Fairly Unhappy
- ☐ A Little Unhappy
- ☐ Happy
- ☐ Very Happy
- ☐ Extremely Happy
- ☐ Perfect

18. In general, how often do you think that things between you and your partner are going well?

- ☐ All the Time
- ☐ Most of the Time
- ☐ More often than Not
- ☐ Occasionally
- ☐ Rarely
- ☐ Never

19. Our relationship is strong

- ☐ Not at all True
- ☐ A little True
- ☐ Somewhat True
- ☐ Mostly True
- ☐ Almost Completely True
- ☐ Completely True

20. My relationship with my partner makes me happy

- ☐ Not at all True
- ☐ A little True
- ☐ Somewhat True
- ☐ Mostly True
- ☐ Almost Completely True
- ☐ Completely True

21. I have a warm and comfortable relationship with my partner

- ☐ Not at all True
- ☐ A little True
- ☐ Somewhat True
- ☐ Mostly True
- ☐ Almost Completely True
- ☐ Completely True

22. I really feel like part of a team with my partner

- ☐ Not at all True
- ☐ A little True
- ☐ Somewhat True
- ☐ Mostly True
- ☐ Almost Completely True
- ☐ Completely True

23. How rewarding is your relationship with your partner?

- ☐ Not at All
- ☐ A little
- ☐ Somewhat
- ☐ Mostly
- ☐ Almost completely
- ☐ Completely

24. How well does your partner meet your needs?

- ☐ Not at All
- ☐ A little
- ☐ Somewhat
- ☐ Mostly
- ☐ Almost completely
- ☐ Completely

25. To what extent has your relationship met your original expectations?

- ☐ Not at All
- ☐ A little
- ☐ Somewhat
- ☐ Mostly
- ☐ Almost completely
- ☐ Completely

26. In general, how satisfied are you with your relationship?

- ☐ Not at All
- ☐ A little
- ☐ Somewhat
- ☐ Mostly
- ☐ Almost completely
- ☐ Completely

For each of the following items, select the answer that best describes how you feel about your relationship. Base your responses on your first impressions and immediate feelings about the item.

27. INTERESTING	**5**	**4**	**3**	**2**	**1**	**0**	**BORING**
28. BAD	**0**	**1**	**2**	**3**	**4**	**5**	**GOOD**
29. FULL	**5**	**4**	**3**	**2**	**1**	**0**	**EMPTY**
30. STURDY	**5**	**4**	**3**	**2**	**1**	**0**	**FRAGILE**
31. DISCOURAGING	**0**	**1**	**2**	**3**	**4**	**5**	**HOPEFUL**
32. ENJOYABLE	**5**	**4**	**3**	**2**	**1**	**0**	**MISERABLE**

Funk, J. L. & Rogge, R. D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. Journal of Family Psychology, 21, 572-583.

Section 4: Some questions about the support you have around you

We are interested in how you feel about the following statements. Please read each statement carefully and indicate how you feel about each statement.

13. There is a special person who is around when I am in need.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

14. There is a special person with whom I can share joys and sorrows.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

15. My family really tries to help me.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

16. I get the emotional help & support I need from my family.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

17. I have a special person who is a real source of comfort to me.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

18. My friends really try to help me.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

19. I can count on my friends when things go wrong.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

20. I can talk about my problems with my family.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

21. I have friends with whom I can share my joys and sorrows.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

22. There is a special person in my life who cares about my feelings.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

23. My family is willing to help me make decisions.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

24. I can talk about my problems with my friends.

- ☐ Very Strongly Disagree
- ☐ Strongly Disagree
- ☐ Mildly Disagree
- ☐ Neutral
- ☐ Mildly Agree
- ☐ Strongly Agree
- ☐ Very Strongly Agree

Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment 1988;52:30-41.

Section 5: Some questions about your mental wellbeing

Below are some statements about your current feelings and thoughts.
Please tick the box that best describes your experience of each over the **last 2 weeks**.

4. I've been feeling optimistic about the future

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

5. I've been feeling useful

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

3. I've been feeling relaxed

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

7. I've been dealing with problems well

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

8. I've been thinking clearly

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

9. I've been feeling close to other people

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

7. I've been able to make up my own mind about things

- ☐ None of the time
- ☐ Rarely
- ☐ Some of the time
- ☐ Often
- ☐ All of the time

Section 6: Some questions about feelings and experiences

For the following questions, please tick the box that best describes your feelings and experiences over the last **7 days**.

1. I have been able to laugh and see the funny side of things as much as I always could

- ☐ As much as I always could
- ☐ Not quite so much now
- ☐ Definitely not so much now
- ☐ Not at all

2. I have looked forward with enjoyment to things

- ☐ As much as I ever did
- ☐ Rather less than I used to
- ☐ Definitely less than I used to
- ☐ Hardly at all

3. I have blamed myself unnecessarily when things went wrong

- ☐ Yes, most of the time
- ☐ Yes, some of the time
- ☐ Not very often
- ☐ No, never

4. I have been anxious or worried for no good reasons

- ☐ No, not at all.
- ☐ Hardly, ever
- ☐ Yes, sometimes
- ☐ Yes, very often

6. I have felt scared or panicky for no very good reason

- ☐ Yes, quite a lot
- ☐ Yes, sometimes
- ☐ No, not much
- ☐ No, not at all

7. Things have been getting on top of me

- ☐ Yes, most of the time I haven't been able to cope at all
- ☐ Yes, sometimes I haven't been coping as well as usual
- ☐ No, most of the time I have coped quite will
- ☐ No, I have been coping as well as ever

8. I have been so unhappy that I have had difficulty sleeping

- ☐ Yes, most of the time
- ☐ Yes, sometimes
- ☐ Not very often
- ☐ No, not at all

9. I have felt sad or miserable

- ☐ Yes, most of the time
- ☐ Yes, quite often
- ☐ Not very often
- ☐ No, not at all

10. I have been so unhappy that I have been crying

- ☐ Yes, most of the time
- ☐ Yes, quite often
- ☐ Only occasionally
- ☐ No, not at all

11. The thought of harming myself has occurred to me

- ☐ Yes, quite often
- ☐ Sometimes
- ☐ Hardly ever
- ☐ Never

[1]Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. British Journal of Psychiatry 150:782-786.

[2]Source: K. L. Wisner, B. L. Parry, C. M. Piontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199

Section 7: Over the last 2 weeks, how often have you been bothered by any of the following problems?

8. Feeling nervous, anxious or on edge

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

9. Not being able to stop or control worrying

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

10. Worrying too much about different things

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

11. Trouble relaxing

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

12. Being so restless that it is hard to sit still

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

13. Becoming easily annoyed or irritable

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

14. Feeling afraid as if something awful might happen

- ☐ Not at all
- ☐ Several days
- ☐ More than half the day
- ☐ Nearly every day

The GAD-7 originates from Spitzer RL, Kroenke K, Williams JB, et al; A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006 May 22;166(10):1092-7. GAD-7 © Pfizer Inc. all rights reserved; used with permission.

We would like to find out how you are feeling now that you are a father. Your answers to some of these questions may show that you are feeling very low and would benefit from talking to a health professional.

If this is the case, please tick this box if you would like us to let you know ☐
Please write your contact details including phone number here:

Name:

Address:

What is your Postcode:

Section 8: Do you have any comments you would like to make about your health and well-being at present?

Positive

……
……
……
……
……
……

Negative

……
……
……
……
……
……

Section 9: Contacts with the health visitor during your partner's pregnancy

In England health visitors routinely see expectant parents during pregnancy to carry out a full assessment of their health and social needs, and to provide information, support and advice about becoming parents.

1. **Were you invited to attend a planned appointment with the health visitor when your partner was between 28-32 weeks pregnant?**

   ☐ **Yes** ☐ **No**

2. **Did you attend this appointment with the health visitor?**

   ☐ **Yes** ☐ **No**

   If no, please state reason for not attending
   ……
   ……..
   .....
   (Please go straight to section 10)

3. **Do you remember what topics were discussed during this contact? Please list as many topic as you can.**
   ……
   ……
   ……

4. Did the health visitor show you or discuss any of the following Antenatal Promotional Guide topic cards with you during this contact? (Tick all that apply)

☐

☐

☐

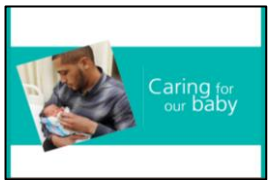
☐

☐

☐

☐

☐



☐

☐

☐

☐

None of the above ☐

Other ☐ specify)……

5. During this contact with the health visitor, were you asked about your needs in relation to becoming a father?

☐ Yes ☐ No

Please give more details

……
……
……

6. What did you find most helpful about this contact?

……
……
……

7. What was least helpful about this contact?

……
……

Section 10: Contacts with the health visitor following the birth of your baby

In England health visitors routinely see new parents and their baby around 2 weeks after birth and again around 6-8 after birth. The aim of these contacts are to assess health and wellbeing of the whole family and provide information, support and advice relevant to the family's needs. The appointment at 6-8 weeks is different to the appointment offered by the GP.

1. **Were you invited to attend a planned appointment with the health visitor when your baby was around 6 - 8 weeks old?**

   ☐ **Yes** ☐ **No**

2. **Did you attend this appointment with the health visitor?**

   ☐ **Yes** ☐ **No**

If no, please state reason for not attending

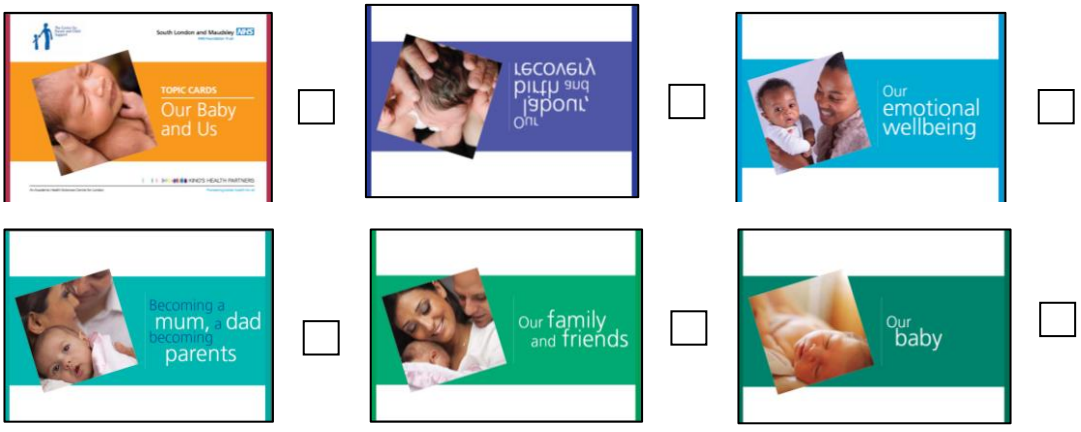
……
……
……

(Please go to straight to section 11)

3. **Do you remember what topics were discussed during this contact? Please list as many topic as you can.**

……
……
……
……

4. **Did the health visitor show you or discuss any of the following Postnatal Promotional Guide topic cards with you during this contact? (Tick all that apply)**



☐ ☐ ☐

☐ ☐ ☐

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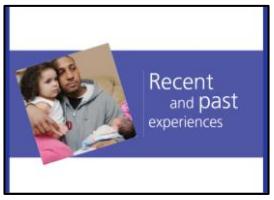

☐

☐

None of the above ☐ Other ☐ (specify)……

5. During this contact with the health visitor, were you asked about your experiences or needs relating to fatherhood?

☐ Yes ☐ No

Please give more details

……..

6. What did you find most helpful about this contact?

……
……
……

7. What was least helpful about this contact?

……
……
……

Section 11:

Do you have any comments you would like to make about the health services you have received during the antenatal and postnatal period?

Positive

……
……
……
……
……
……

Negative

……
……
……
……
……
……

8. Is there anything else that you would have liked to receive from health services to support your transition to fatherhood?

……
……
……
……
……
……

This is the end of the questionnaire, thank you very much for completing it

Please fill in the date you completed the questionnaire Date / Month / 20……

Please return it in the FREEPOST envelope which is enclosed or email to sharin.1.baldwin@kcl.ac.uk

We may want to ask you to take part in a one-off telephone interview about your experiences of the services received and of completing these questionnaires. The interview is likely to last between 20 - 60 minutes, and will be audio-recorded. It will be carried out by phone and will be arranged at a time to suit you. In recognition of your contribution and your time, you will be offered an additional £25 gift voucher.

Please tick this box if you are happy to be contacted for this interview ☐

Please provide your contact details so that more information can be provided about this interview

Telephone number:
Email:

Please tick this box if you wish to receive a copy of the results when the study is completed ☐

If you have any worries about your health and wellbeing then you should make an appointment to see your GP or call NHS 111. They can help you and offer some form of support or treatment. Here are some useful links for more information that may help and telephone numbers for useful helplines for fathers:

- http://www.nhs.uk/conditions/postnataldepression/pages/introduction.aspx
- http://www.nhs.uk/Conditions/stress-anxiety-depression/Pages/improve-mental-wellbeing.aspx
- http://www.nhs.uk/Conditions/stress-anxiety-depression/Pages/dealing-with-depression.aspx

Helplines:

- Anxiety UK: 08444 775 774
- Families Need Fathers (FNF): 0300 0300 063
- Mind: 0300 123 3393
- PANDAS Pre and postnatal depression advice and support: 0843 289 8401

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NHS
National Institute for Health Research

APPENDIX – 27

Raw score to metric score conversion table for SWEMWBS

Raw Score	Metric Score
7	7.00
8	9.51
9	11.25
10	12.40
11	13.33
12	14.08
13	14.75
14	15.32
15	15.84
16	16.36
17	16.88
18	17.43
19	17.98
20	18.59
21	19.25
22	19.98

APPENDIX – 28

Qualitative Interview Topic Guide for Fathers (Phase - 3)

NEW DAD STUDY

The interview should take no longer than 60 minutes and you are free to leave the study at any point. Do you have any questions before we start the interview?

1. The level of involvement with the intervention and the reasons for this.
    - Not involved in the intervention: to ascertain reasons for non-involvement
    - Fully involved in the intervention (both antenatally and postnatally): what helped them to fully engage
    - Partially involved in the intervention (only antenatally or only postnatally): to determine reasons for partial participation and any barriers
2. Fathers' perception of the intervention – Were you exclusively invited to take part in the Promotional Guide contacts – antenatally and postnatally with your partner? In what ways did you find the Guide material included you as a father? How were you made aware that the Promotional Guides are aimed at fathers as well as mothers?
3. As a father, to what extent were you given the chance to talk about your feelings and emotional well-being and any concerns you have? In what ways, did the Guide materials used by the practitioner whom you saw help you plan ways to help you with any emotional concerns that you had?
4. As a father, what aspects of the Guides did you find helpful? How would you describe the relationship between you and the practitioner?
5. How were the topics chosen for discussion during these visits? As a father, how would you describe your participation in this?
6. What changes did you make following the discussions taken place with the practitioner using these guides, if any? How did you follow up on any advice given during the Promotional Guide visits?
7. What were the barriers and facilitators influencing engagement of fathers with the Promotional Guide System?
8. What attracted you, as a father, to participate in the study?
9. What was it like to complete the questionnaires at 3 different points for this study?
10. Is there anything that could have been done better?

I would like to ask you a few more questions about your antenatal and postnatal contact with the health visitor.

Fidelity Checklist:

1. Did you feel listened to and heard by your practitioner?

2. Did you feel that your practitioner understood and appreciated you, your family and your circumstance?

3. Which of the following most closely reflects your practitioner's use of the Promotional Guide materials and content during your contact?
   - Your practitioner helped you to use the Promotional Guide Topic Cards as the basis of your contact
   - Your practitioner helped you to use the Promotional Guide Topic Guide as the basis for your contact
   - None of the above

4. Which of the following most closely reflects your practitioner's use of the Family Map with you and your partner?
   - Your practitioner helped you to use the Family Map as the basis of your contact
   - Your practitioner helped you to explore some of the Family Map during your conversation
   - Your practitioner helped you to make full use the Family Map to inform your conversation
   - None of the above

5. Did your practitioner help you to identify specific main priorities?

6. Did your practitioner help you to make a written record your main priorities?

7. Did you make a written record of the main areas for improvement identified through your conversations with the practitioner?

8. Did your practitioner help you to make a written record of your shared goals and plan for achieving them?

9. Did your practitioner help you to identify specific family members, friends or other social supports to assist with your goal achievement and plans?

This is the end of the interview. I would like to thank you very much for taking part in this study. Do you have any questions you would like to ask?

APPENDIX – 29

Qualitative Interview Topic Guide for Health Visitors (Phase - 3)

NEW DAD STUDY

The interview should take no longer than 60 minutes and you are free to leave the study at any point. Do you have any questions before we start the interview?

Topic Guide: (*Questions will be related to these topic areas and based on findings of the questionnaires)*

1. The level of involvement with delivering the intervention and the reasons for this.

2. To what extent do you feel the content and methods of the Promotional Guides are inclusive of fathers?

3. What steps do you take to involve mothers in the Promotional Guide contact? What, if any, additional steps prior to and during the contact, do you take to specifically involve fathers?

4. How often do you exclusively invite fathers to take part in the Promotional Guide contacts – antenatally and postnatally? How do you inform fathers that the Promotional Guides are aimed at fathers as well as mothers?

5. How do you manage and balance the time between the needs of the mother, father and baby? What do you do when the needs of the mother and father differ and/or conflict?

6. To what extent do you feel as a female health professional that you are able to appreciate and understand fathers' experiences? What particular issues and experiences do you draw on to inform your practice in this respect? How do you balance and prioritise paternal mental health against the other aspects of fatherhood? To what extent do you think that the presence of fathers during the Promotional Guide contact is helpful or detrimental to mother's participation and use of the contact?

7. What sort of changes have you seen fathers carry out following the discussions taken place/ advice given during the Promotional Guide visits?

8. What sort of barriers to using the Promotional Guides with fathers have you experienced? What sort of barriers to maintaining engagement with fathers from the antenatal Promotional Guide contact through to the postnatal Promotional Guide contact have you experienced?

9. What are the facilitators for effective delivery of the Promotional Guide System to fathers? Is there anything that would help fathers engage more with the Promotional Guides?

10. How well are the Promotional Guides received by fathers? Do they find them helpful? System?

11. What sort of organisational support/ commitment do you have for using the Promotional Guides with fathers?

12. Any other comments?

APPENDIX – 30

Fidelity Checklist for Qualitative Interviews with Health Visitors (Phase - 3)

NEW DAD STUDY

1. Which of the following most closely reflects your use of the Promotional Guide materials and content during your contacts with parents/ fathers?
   - Do you use the Promotional Guide Topic Cards as the basis of your contact?
   - Do you use the Promotional Guide Topic Guide as the basis for your contact?
   - Do you integrate exploration of some Promotional Guide Topics into your conversation with parents/ fathers?
   - Do you make use the promotional Guide Topics to inform your conversation with the parents?
   - None of the above

2. Do you complete the Family Map with the parent(s)? Yes ☐ No ☐

3. Which of the following most closely reflects your use of the Family Map?
   - You use the Family Map as the basis of your contact
   - You explore some of the Family Map during your conversation
   - You make use the Family Map to inform your conversation with parents
   - None of the above

4. Do you identify specific main priorities with parents? Yes ☐ No ☐

5. Do you encourage parents to make a written record her/his main priorities? Yes ☐ No ☐

6. Do you encourage parents to make a written record of her/his main areas for improvement? Yes ☐ No ☐

7. Do you encourage parents to make a written record of her/his shared goals and plan for achieving them? Yes ☐ No ☐

8. Do you encourage parents to identify specific family members, friend and other social supports to assist with goal achievement and plans? Yes ☐ No ☐

9. Do you routinely complete the PG Family Strengths and Needs Summary?
   - Complete fully and record
   - Complete partially and record
   - Do not complete or record

APPENDIX – 31

Observation Checklist for Health Visitor Promotional Guide Contact (Phase - 3)

NEW DAD STUDY

No.	Check List Item	Options	Tick
1.	Where did the visit take place?	Home	
		Clinic Setting	
		Children's Centre	
		Other Specify	
2.	Who was present during visit?	Mother & Father	
		Only Mother	
		Only Father	
		Other (Comment)	
3.	Which of these most closely reflects the health visitor's use of the Promotional Guide materials and content in their contact with the parents?	Promotional Guide Topic Cards were used as the basis of the contact	
		Promotional Guide Topic Guide was used as the basis of the contact	
		Integrated exploration of some Promotional Guide Topics in the conversation with the parent	
		Made use of the promotional Guide Topics to inform the conversation with the parent	
		None of the above	
		Other (Comment)	
4.		Yes	

	Did the health visitor complete the Family Map with the parents?		
		No	
5.	Which of these most closely reflect the use of the Family Map with parents?	The Family Map was used as the basis of the contact	
		Integrated exploration of some Family Map into the conversation with parents	
		The Family Map was used to inform the conversation with parents	
		None of the above	
6.	Did the health visitor identify specific main priorities with the parent?	Yes	
		No	
7.	Did the parent make a written record her/his main priorities?	Yes	
		No	
8.	Did the parent make a written record of her/his main areas for improvement?	Yes	
		No	
9.	Did the parent make a written record of her/his shared goals and plan for achieving them?	Yes	
		No	
10.	Did the parent identify specific family members, friend and other social supports to assist with goal achievement and plans?	Yes	
		No	
11.	Did the health visitor complete the PG Family Strengths and Needs Summary?	Fully completed and recorded	
		Partially completed and recorded	
		Not completed and recorded	
12.	Was the father (if present) asked about his mental health and wellbeing?	***Give details:***	

13.	Was the father given an opportunity to raise concerns or discuss his own needs?	***Give details:***
14.	Did the health visitor address fathers needs/ queries?	***Give details:***
15.	What steps did the HV take to involve fathers in the Promotional Guide contact?	***Give details:***
16.	Overall comments about this contact:	

APPENDIX – 32

Interview with a first-time father - transcript example (Phase – 3)

[Start of recorded material at 00:00:00]

Interviewer: Okay, so tell me about your involvement with the health visitors, do you remember seeing the health visitors during your partner's pregnancy at all?

Respondent: So, not during the pregnancy but after we came back to our home which was probably two days after the baby was born. We had one visit from the health visitor and then two or three more follow on visits over a period of the next two to three months and I was able to attend most of them, so yeah.

Interviewer: For those appointments, were you invited to be there, were you asked to be present?

Respondent: Not explicitly but we had a slightly difficult birth in the sense that the baby was delivered in the operation theatre. It was not a C section, but they used, what do you call it? The tongs to pull the baby out…

Interviewer: Forceps.

Respondent: The forceps, sorry. My wife was, obviously, not in the best of physical shape for a couple of weeks after that, she was still recovering so I was mostly trying to get help, her and the baby and that's how I got to participate in most of them.

Interviewer: Okay. And were you both offered an appointment in the antenatal period at all?

Respondent: No, so the appointment was always for my pregnant wife, I tried to attend as many of them as I could, but it was never an explicit appointment for me.

Interviewer: At any point, do you remember the health visitors using something called a promotional guide at all?

Respondent: A promotional guide …

Interviewer: They may have shown you a range of different topic cards or they may have mentioned a range of different topic cards and then asked you to choose what you want to discuss.

Respondent: The health visitors, they always had a lot of material so they will give us pamphlets, print outs, like a list of local best support groups and the like. I don't recall anything specifically addressed to the partners if that's what you're asking?

Interviewer: Generally during the contact with the health visitors, did you feel that you were given a chance to talk about your own feelings or concerns at the time?

Respondent: Short answer, no. I think the focus of the health visitors in my personal opinion is rightly focused on the mother and the baby's wellbeing and I don't think they give a conscious thought about the husband or the father or the partner, however they describe it. It does not seem, based on my limited interactions that is the priority.

Interviewer: What else would you have liked to see?

Respondent: So, I would say a couple of things. Number one is I would have liked to have seen a more organised form of information sharing, given that all of them work for NHS or the social services which is all part of the provided health services. The sheer amount and method of sharing information is overwhelming to the extent that you don't really [consume or] consider a lot of information and you're just relying on your friends who have become parents before you to filter you and pass on their best advice. So I think that definitely needs improving.

Second is, like it's not a complaint, I think given the limited resources the NHS has, they have to rightly focus on the wellbeing of the mother and the children. But just after we had the delivery, because of the difficulties we had with the birth, my wife was put in a recovery ward in [redacted] Hospital. And it was just a bed over there and a very uncomfortable chair for me to be around with her and the baby, and given that I had not slept for more than 40, 45 hours, like it was quite physically exhausting to the extent that I literally slept on the floor because I needed a few hours of shut eye time, and I didn't want to be away from my wife and child at that point in time.

I think some more thought on those dimensions would be helpful, like how you … usually most pregnancies would have a birthing partner on the ward so how do you consciously think about it and carve out the minimum of support for them on these dimensions during the pregnancy and beyond that?

Interviewer: That's really helpful, and anything after the birth at all, are there any areas that you feel things could be different?

Respondent: I think when the health visitors came, again, they were very focused on the baby and the mother's wellbeing, and they asked some mandatory and important questions like do you have enough money for example? And they also ask in confidence do you feel safe and secure in this household for the baby and the mother? Which I think is part of the standard protocol of questions. But they never asked anything to the birthing partners or the father, so they never ask are you feeling exhausted, are you feeling [over] … and are you okay? I'm not sure if that should be a conscious priority, I can't make that decision, …. because it's not always easy for the father to be … like it's a very rewarding period, but it's also very exhausting in terms of the physical and mental demands that you have.

So I think some support there if possible, would be helpful, and the support could be as simple as having a five-minute chat. Like this is normal, everyone goes through this, if you have any issues here are two or three

numbers you can call, something of that kind would be helpful but not critical, I think.

Interviewer: Okay. Do you see any barriers to fathers being involved at the moment with the health professionals, engaging with the health professionals?

Respondent: I think it's a mindset, it's a mindset that fathers … how should I describe it? As fathers, we don't have control over the situation, so you are there to witness the whole process of birth, and you try your best to support the wife and the children and the child. But you don't have any control beyond that, which is sometimes slightly frustrating. But I think the main barrier in offering any kind of support to the fathers is the mindset that birth is all about the mother and the child, and everything else is a secondary consideration, which could be fine given that you only have a limited resources, it's a national healthcare service set up in this country, so I fully appreciate that.

But there should be a conscious thought now whether there is a requirement or not to support the fathers because, like thankfully we are quite comfortable in our lifestyle and we don't have any kind of financial problems. But if you are a father to a new born child and you have some kind of financial problems, the level of anxiety would definitely go up because you now have to worry about your children as well on top whatever your existing set up was. I think these are the things that come to my mind right now.

Interviewer: Just thinking about this study, the new dad study, what attracted you as a father to participate in the study?

Respondent: I think there are two main reasons. One is the researcher who approached us while we were waiting in the patient area before we had one of the parental appointments, she explained everything clearly, she said that this is a study run by, is it King's College or UCL?

Interviewer: Through King's College, London, yeah.

Respondent: King's College, sorry. She explained it was a King's College academic study, this is what they're focusing on and this is asked from you, probably half an hour, an hour later or … I knew a bit about King's College, and I would like to support the research if I can, so that was one. And the second one was the topic in itself, I hadn't explicitly thought about this, but when she gave the two line or three line statement about the topic I was like, well this could be an area of consideration, so if I could support it, why not.

Interviewer: Great and I'm glad you did. So thank you for that.

Respondent: You're very welcome.

Interviewer: What was it like completing the two online questionnaires?

Respondent: Quite straightforward. I think it was a few months back when I completed that, I don't recall the questions in detail per se, but what I do remember is it was trying to gauge a lot about your anxiety levels, your emotional state. And you were using good research techniques in the sense that instead of just asking one question, I think the questions were repeated in three or

four different forums so that you had a better view of what exactly the person is trying to answer. So, yeah, that was quite straight forward, simple to fill and no issue at all.

Interviewer: Great. Is there anything that could have been done differently from the research side of things do you think, in terms of the way you were approached and what you were asked to do for the study, could anything have been done better?

Respondent: Not really, I think the only other point that you could potentially consider is if you want to increase the sample size, you can approach people in the outpatients, which is great by the way because, you could also consider emailing them and ask them to write in a brief context. And I think you may get a few more responses that way, so a few more interested participants that way. But there's nothing major that stands out in terms of feedback about the manner in which this was done.

Interviewer: Great, and is there anything else you want to add at all, any other views about the area, father's mental health and wellbeing, or just any other views in general?

Respondent: Yeah, I would like to mention one thing. I think the NHS is great as an institution, the fact that it's a national health service, free of cost, so that is always great. But I feel that when it comes to mother and child and all the pregnancy related stuff, once the baby is born you are handed over to these nurses, midwives and you go to this breast milk support clinics, they're a bunch of … I don't remember, are they called midwives as well over there?

Interviewer: You might …

Respondent: Lactation consultants. I felt like there was no uniform or scientific approach about information sharing. It was a lot more anecdotal and what had worked with them in their experience, rather than one consistent message which I would have expected from an institution like the NHS. That was definitely something which we did not anticipate.

A related point to that was we had some difficulty with the breast-feeding at the start. Through a lot of perseverance, particularly from my wife, we managed to get everything back on track. But I think there's element of people judging you if you are not able to breast feed. So I think that made things slightly harder on my wife because she felt even those she was approaching these support groups, there was a bit of an element of … I don't know how to best describe it but you get the sense, right? She felt that she was being judged. There was something … an inadequacy because of her rather than the other problems. So in the end we just went to a private lactation consultant to help us out because we tried multiple support groups, and everyone had such a different opinion. It was not scientific, it was more an anecdotal kind of set up.

Interviewer: Okay. That's really interesting, great, thank you for that.

[End of recorded material at 00:14:56]

APPENDIX – 33

Interview with a health visitor - transcript example
(Phase – 3)

[Start of recorded material at 00:00:00]

Interviewer: Okay, so to start with can you tell me how involved you are with using promotional guides in practice?

Respondent: Well I use them antenatally and postnatally with most of my families. Sometimes if the dad's not there I try and use them. And sometimes if we're in a rush I may not get the chance. But otherwise I use them whenever I can.

Interviewer: So thinking about the content and the methods, how inclusive would you say they are of fathers at the moment?

Respondent: Oh I think very inclusive. I think that everything we talk about can be talked about with dads there.

Interviewer: Okay. And is there anything in particular that makes them inclusive of fathers?

Respondent: Well, you know every subject is relevant to them. Whether it's antenatal or postnatal you can always include the fathers in every subject that you're talking about, or everything that comes up. I think they're very inclusive.

Interviewer: So at the moment what steps do you have to take to engage mothers with the promotional guides?

Respondent: I don't really make any particular steps. When they come I've usually got them out and once we've had a conversation about they are and how things are.

I just say to them you know we're going to use they cards. And would they like to chose three subjects that they want to talk about, to pick one out. And it's usually a really easy thing to do.

Interviewer: And are there any additional steps you have to take when you're using them with fathers?

Respondent: Not really. I think the difficult when you've got mum and dad is that they can be that they want to talk about everything. Or more things than you've got time for.

So a lot of it is trying to narrow it down to be specific about what we can do in the timeframe.

Interviewer: So how do you balance the time between the two parents if you've got both mother and father wanting to discuss different things? How do you balance

that?

Respondent: That's quite difficult. So sometimes I'll ask them what are the main things they want to talk about. Or I'll try and maybe ask them one each if they've got different things. And then maybe a general one. Sometimes they all merge into one because all the topics cover quite a big range.

Interviewer: And how do you inform fathers that the promotional guides are aimed at them as well, as well as mothers?

Respondent: Well when we look at the topics you know I'll just say to them these are the topics that you can talk about. If there's anything else you want to talk about we can try and talk about that too.

And I just think they're just inclusive. There's nothing specific that just for mums I think. So I just say to them, these are the topics, would you like to choose something you'd like to talk about.

Or if there's anything else that's really burning that you wan to talk about, we can talk about that first.

Interviewer: And how do fathers normally react? Do they expect to be involved, or are they surprised? How do you find [unintelligible]?

Respondent: Some are I think, very sort of, look at the wife and let them choose. But there are some very engaged dads who I think are quite pleased to ask and included.

Some don't have anything. They'll say well I'll leave it to my wife. And I'll try and engage them in that.

I think these days most dads want to be involved and are willing to ask questions and have a discussion.

Interviewer: So to what extent do you feel being a female health profession has an impact on your understanding of fathers' experiences?

Respondent: I think for me certainly in the last few years since doing quite a lot of training and attending training around perinatal mental health and [infant] mental health the role that dads have. That for me has had a really big impact on my understanding of the importance of dads being involved.

Interviewer: Okay. So when you talk to fathers how do you prioritise paternal mental health in those discussions?

Respondent: Well I try and, you know, when we're talking about maternal mental health and the importance of that. I try and then specifically say to dads you know that your mental health is as important as mum's.

And it's important that you look after yourself as well as looking after the mum. And I think that they're quite surprised of the importance and also the fact that we're including them in that.

Interviewer: And how often do you exclusively invite fathers to these appointments?

Respondent: Well if I can speak to the mum or leave a message I'll always say that both parents are invited and we'd like to see the dads as well. It doesn't always happen. I would say that probably most of the times it's the mum. But you know we do get some dads.

Interviewer: So are there any systems in place within the organisation to ensure that fathers are exclusively invited?

Respondent: Well I think the letter goes out to parents, dear parents. Or I don't know if it's, the antenatal one, but certainly I think the letter is inclusive. It doesn't say that it's mum only.

I think what tends to happen is that the dad brings the mum and then they're surprised to be included.

Interviewer: So what would you say are the benefits of having both parents present at these contacts?

Respondent: I think it just makes sense to have both parents there. And it's interesting for me when I first started health visiting, you know that I wouldn't have expected a dad to be there or a dad to be involved.

So it's really nice to see how things have changed and I think certainly in my practice I would now always include the dad if I can. And make a point of including him and asking him kind of questions about his health, his mental health. And how he's managing and looking forward to being a dad. Or coping as a dad.

Interviewer: So you said it's really important to have both parents there at the contact. What are the benefits of having both of them?

Respondent: I just think it's important for the dads to know about mums mental health and how he can support her. But I think it's also important for the mum to know about how important it is to have a dad in that child's life.

And for the dad to be active in the life and not just on the periphery. That it's good for the child's mental health and it's good all round for everybody.

And I also think it's quite good for him to hear things about maybe it might come up that mum's got something in her mind that's worry her that she perhaps wouldn't mention to him. So it comes up in the conversation.

And the same for the dad. That he might talk about stuff that perhaps they wouldn't talk about on their own. So I suppose it's a way of opening up a conversation that perhaps they wouldn't have.

Interviewer: And in your view are there any negative points to having the father and mother there at the same time?

Respondent: Well the obvious ones are things, if the relationship isn't particularly good. Or if there's a domestic violence in the relationship. Or there are things that mum wants to talk about that she doesn't want to talk about in front of the dad. Or visa versa I suppose. And that's the only negatives I can see.

Otherwise I think that the positives outweigh the negatives. And I suppose if you say to mum or dad that you can always contact me, this is my number, if you've got any questions. And then that gives the opportunity for mum to ring you if she does want to talk about something without the dad being there.

Interviewer: Okay. And what sort of changes have you seen fathers carry out following the discussions you've had during a promotional guide visit? Can you think of any examples?

Respondent: Well that's always difficult because we don't always see them again, unfortunately. You know you could see them for antenatal and then you might not see them again. Or you could see them for postnatal and not see them again. So I think that's quite a difficult question for me to answer.

I suppose maybe at the six week check sometimes, you know, if the dad comes he'll say that ... I had one dad who said he learnt from the antenatal contact how important it was for him to be involved in his child's life. So he was making a conscious effort to be involved and to do things that perhaps he wouldn't do. Like skin to skin and supporting the mum with breastfeeding and things like that.

Interviewer: And have you come across any barriers to using promotional guides in practice, in your experience?

Respondent: I think the biggest one is always going to be time. You know we don't have very much allocated time. They can open up a huge can of worms sometimes because of the nature of the topics. And also because it's led by them.

Which is great. I think it makes sense for it to be parent led, rather than led by the health professional. But I think it's quite hard to sometimes fit it into the timeframe. But apart from that I can't see any negatives to it.

Interviewer: And how much time do you normally allow?

Respondent: Well I think half and hour really is the minimum that you could have a meaningful conversation. I mean I know that sometimes people are trying to do it in less than that.

But I think if you want to have a meaningful conversation that means that they're going to go away with something. Then you can' really do it in less than half and hour.

Interviewer: And what sort of barriers have you experienced in keeping fathers engaged from the antenatal promotional guide contact up until the postnatal promotional guide contact?

Respondent: Well I think their work is a barrier. And I think certainly in some, we have quite a large Romanian population, and I think their employment is that if they don't work they don't get paid.

So I think for them taking time out is quite difficult. So very often mum comes on her own. And again when you see them at the postnatal and also things like new birth visit and six week checks they very often come on their own.

Interviewer: Okay. So at the moment, thinking about the systems you have in place. What would you say are the facilitators for delivering promotional guides effectively, or using them effectively with fathers?

Respondent: I think you need continuity and I think that's something that currently we don't have in this trust. I mean for me it would be great if I could do an antenatal, a postnatal, a new birth and a six week check with the same family.

That way I'd know what we talked about. Maybe not specifically in every one, but I would have built up a relationship and I would've known the conversations that we'd had. So by the time we got to the six week check. I think I'd feel I know them fairly well.

And it would be great if the dad had come to every one. It's unlikely, but if they did I think that dad would have got a real, benefited really from having those four contacts.

Interviewer: And are there any things in place at the moment that work well that enable you to deliver this intervention to fathers?

Respondent: Well only that they're invited and encouraged to attend. I can't think of anything else that works particularly well. I mean we're not getting to every father, we know that, you know we often see mums on their own.

But I think the more we do it and word gets round. Because it's very often word of mouth. You know if someone says I want to bring my husband in it's really good. Then hopefully someone else will be encouraged to turn up.

Interviewer: Okay. So apart from word of mouth, if there anything else we can do to get fathers more involved?

Respondent: We can advertise I suppose. We can put posters up maybe. If we ring you know and say we really want to see your partner or your husband there, it's really important that he attends.

I suppose it's getting across and maybe in the midwifery service as well, getting across the importance of having dads there.

Interviewer: And when you have used them with fathers how well have fathers received it?

Respondent: I mean we don't, I don't currently do any kind of evaluation. But you know the little bit of feedback that you get is that they're glad they came. Or enjoyed the conversation.

Or that they learned something from it. Which if they take something away from that contact then it makes it worthwhile.

Interviewer: So in your view would you say they've found it helpful?

Respondent: I think so, yeah.

Interviewer: Yeah. And what sort of organisational support or commitment do you have in using the guides with fathers? I know we've touched on this a little bit before.

Respondent: Yeah. I mean I think it's really difficult because we're all ticking boxes and we've all got KPIs that we need to meet. And I think it is, I think if I set my own appointment times then I make sure that I make sure I give enough time.

If somebody else is setting them. If I go and do someone else's clinic and there are only 20 minutes for each appointment I think that's quite difficult.

So in terms of support I think we could probably do with a bit more with regard to understanding the importance of the context and maybe making the timings better.

Interviewer: Okay. So tell me a bit more about the timings, what could be done?

Respondent: Well I just think a realistic time is a minimum of 30 minutes per contact. Ideally it should be longer than that. And I know that some areas they do them in groups.

And although I think it's better to do it individually, if that's the way it's got to be done then it's better than nothing.

So I suppose with regards to management they are in a difficult position because they have to reach a certain amount of key performance indicators. But I think they should understand that they quality of doing a promotional guide interview, you know a contact, would be better if we had longer time.

Interviewer: And in terms of organisation support for training and supervision what kind of things do we have in place?

Respondent: Well currently we do have training. We at the moment don't have any refreshers. But we are due to move trusts and I don't know what kind of support they have available in the new trust.

But currently where we are we've got I think quite good support with regard to training.

Interviewer: So overall what are your views of promotional guides relating to fathers?

Respondent: I think it's a really good resource. I think it's something that we should be doing all the time. I think that it's a really good way of engaging dads into the conversation that we haven't done before.

Interviewer: Is there anything else that you want to say about the topic at all, anything else we haven't covered?

Respondent: I don't think so. I think we've talked about most of it.

Interviewer: Yeah. Okay. Thank you very much.

[End of recorded material at 00:17:25]

APPENDIX – 34

Initial codes relating to first-time fathers' experience of health visitor contact, with example quotations

Initial codes	Extract from transcript
Invitation to attend	"They didn't specifically ask me or specifically ask me to be at home when they came. So they didn't have to ask me specifically, I was present, so they didn't have to invite me or anything, I was just there in the same room with P and the baby." (F19, pg-2) "Ah, not that I was directly in ... I mean she came to the house a couple of times and so obviously I was there, I wasn't told to leave the house. When she's, after the birth of the baby, yeah, I mean it wasn't, um, went to see, um, I've never been to the place she goes to, w"hich I think is [redacted] Hospital. And it wasn't, it's not that I wasn't invited, it wasn't made sort of expressly clear, "Oh, you know, your partner needs to come along as well". And so it was, you know, when she'd done that it's, you know, I would be at work." (F13, pg-4)
Visit from the health visitor	"I don't think we had any health visitors prior to her giving birth." (F38, pg-1) "apparently at sort of 8:30 in the morning somebody else came and just kind of looked around the house…….And kind of … I guess my wife got the impression that it was just to make sure … it felt like a safeguarding sort of visit. So, they're the only sort of two times that I remember anything, sort of people coming to our house." (F45, pg-1) "No, nobody came to the house when she was pregnant." (F35, pg-1)
Involvement	"Not really that involved, I mean to be honest, it was, um, when the Health Visitor came it was sort of talking to Laura but I was sort of sat on the sofa as well, and she didn't really sort of engage with me really, it was, you know, the sort of process was on Laura, which I kind of [accepted] that, that you know she was the one who was pregnant and I was sort of felt as if I was sort of the support person.." (F13, pg-1) "I believe the visitors, they were trying to involve both parents, asking different types of questions, observing the behaviour, how we talked to each other, where we kind of ready for the baby. So yeah, I think it was like a 50/50, based on [our needs]." (F28, pg-1) "It didn't feel like something to be particularly involved in… is that they came round, weighed, measured, checked over, asked if we had any questions and then kind of said goodbye". (F32, pg-2)

APPENDIX – 35

Interviews with first-time fathers

Constructing an initial framework with themes and subthemes

1. **Fathers' experiences of health visitor contact**
    - Visits from the HV
    - Relationship with HV
    - Invitation to attend

2. **Fathers' experiences of Promotional Guides**
    - Use of Promotional Guides
    - Information received
    - Involvement

3. **Fathers' experience of the NHS**
    - Positive experience of the NHS
    - Lack of support

4. **Fathers' experiences of challenges in fatherhood**
    - Challenge of going back to work
    - Breastfeeding

5. **Fathers' mental health and wellbeing**
    - Discuss own feelings
    - Barriers to accessing help
    - What would help fathers

6. **Fathers' experience of the research process**
    - Motivation for participating
    - Experience of completing the questionnaires
    - Communication with researcher
    - Benefits of participating in research

APPENDIX – 36

Initial codes relating to health visitors use of Promotional Guides in practice, with example quotations

Initial codes	Extract from transcript
Involvement with Promotional Guides	"I've been using it through antenatal contacts with expectant mums. So we just introduce it to them and let them know what the promotional guide is about, and you know sit through with the partners as well if they're available, and go through the forms really and the cards." (HV9, pg-1) "At the moment, not very much because as I mentioned we are only doing antenatal contact for vulnerable clients." (HV8, pg-1) "we are currently using the promotional guidance for antenatal care and so that's from the 24th, actually, week of gestation in pregnancy with families. We haven't really used it that much for postnatal care I must admit, even though we did receive the training". (HV10, pg-1)
How PGs are used in practice	"The problem is that you want to give this advice and give this information but if you are using the promotional guide, it's not an advice-giving session, it's led by the client. So I guess it's a bit of a compromise between letting them set the agenda, but also wanting to maximise the impact of the visit from a health promotion point of view. I also feel that the promotional guides that I'm balancing those two bits, and I have to kind of hold back a little bit on the amount of health promotion I would usually give. It's a bit of a tricky one because obviously our commissioners, our managers, we've got a whole load of boxes for each contact of health promotion and things we have to cover." (HV8, pg-2) "So, if fathers are at the contact, I'll always make sure I include them in the conversation. I'd show them the guides, tell them that it's a prompt for them to raise any questions, if they've got any questions that they want to raise. Normally, at the antenatal it's about labour for the mums, but for the dads becoming a parent and the care of the baby, seems to be the ones that they go for. More antenatal than postnatal. I haven't really used it postnatally, but antenatally, I always use them." (HV4, pg- 1)
Inviting fathers	"So the invite says, you know, the parents to be, so we ... on the invitation letter it doesn't specifically talk about the fathers. However I do follow up with a phone call with the mums, just to let them know that the dads are invited as well if they are available, and they are quite happy to bring them along." (HV9, pg-2) "We don't invite, well personally, we don't invite or not invite. They're either there or they're not, and they're usually not". (HV8, pg-1) "I've never known a contact where the father's been exclusively invited". (HV4, pg-2)

Steps taken to engage mothers	"Well I suppose the initial step it's always … you know, because it's something new to them and they're so used to health visitors, especially if it's their third or fourth child, health visitors coming in and the particular way we kind of deliver the information, so it's about trying to help them to participate with using the tools. So usually we explain to them what it is, and because it's pictorial they're actually more engaging with it and feel more included as opposed to the other tools that we use where we just sort of talk to them and tell them what should be done." (HV10, pg-2) "Is to prepare them before I present them with the, you know, the cards and things like that, you need to prepare them and tell them what is it about and what is the value for them. Because some of them, they often confuse why they're seeing a Health Visitor to start with, because they already have antenatal care, and especially, the second or third months. So, you have to explain to them that it is not only about physical examination and, you know, the scans and all this, but it's about this - themselves in the community, what's going on with them, how they connect with the whole other systems. And, you know, and how they're going to feel as mothers, what is there for them, really, as mothers, how are they're going to enter into this motherhood, and who is there to support them? And their feelings and - so, it's more to do with their feelings and the - and, you know, that will invariably become their behaviours later on, as well." (HV1, pg-2)
Steps taken to engage fathers	"I haven't had to do anything different from, you know, the times that I've used them. I find that the dads are as keen as the mums are. So I've not had to do anything different or say anything different to the dads that I've not said to the mums. Yeah, I feel ... I find they are as keen as the mums really." (HV9, pg-2) "I think I am always aware of the need to involve dad if he's around, and I don't think… it does change your language. You're not talking about the baby, it's your baby. I think the trickiest conversations can be around attachment, particularly if mum is planning to breastfeed because I always try to … and this is where the promotional guide is sometimes not a good fit with health visiting practice, because the more information you can get about the demands of breastfeeding antenatally, the better in terms of encouraging a continuation of breastfeeding i.e. if mum's expectations are that she may have to be putting the baby to her breast every hour, certainly in the first week or two and what that's like, then the more likely she is to not get despondent with that. When I see fathers in contact, I do try to actively engage with them and bring them into the conversation. How much I understand of their experience I guess depends on how much they disclose and how much they want to engage with me." (HV8, pg-2)
Managing time between both parents	"Well in the visits I've done in the past when it's both parents I've had situations where mom does all the talking. And I try to make eye contact with the daddy just to make sure look you're involved as well." (HV6, pg-6) "More time seems to go towards the mother, normally, because they've got more questions." (HV4, pg- 3)

	"I would probably ask the woman first and then I say to the husband, You will be given your opportunity to discuss as well." (HV2, pg- 4)
Follow up and changes	"Being supportive to the mum, definitely, without a doubt, more participation with baby care, even things down to changing nappies, and things like that, and as I say, often, they're very involved with the practical element. Like, they will change the nappy before mum, that's what I've observed. Yeah, and more open discussion really, more psychologically-based" (HV3, pg- 8) "I have no opportunity to see them, once the discussion, because, you know, what's happening, the way the system is organised, I will see these people only once and perhaps there's no follow-up. I won't be necessarily the Health Visitor who will be visiting their child. So, it's the systemic failure, really, in the process." (HV1, pg- 9-10) "Well that's always difficult because we don't always see them again, unfortunately. You know you could see them for antenatal and then you might not see them again. Or you could see them for postnatal and not see them again. So I think that's quite a difficult question for me to answer". (HV5, pg-4)

APPENDIX – 37

Interviews with health visitors

Constructing an initial framework with themes and subthemes

5.3 HV involvement with Promotional Guides

5.4 Using Promotional Guides in Practice

- How PGs are used in practice
- Inviting fathers
- Steps taken to engage with mothers
- Steps taken to engage with fathers
- Managing time between the mother and father
- Follow up and changes

6. Perception of Promotional Guides by parents and health professionals

- Inclusive of fathers
- Fathers' views of PGs
- HV's views of PGs

7. Enquiry into fathers' mental health

8. Benefits of involving fathers

9. Barriers and facilitators

- Challenges
- Barriers
- Being a female worker
- Facilitators
- Training & Other

APPENDIX – 38

Summary of observations of health visitors' Promotional Guide Contacts

No.	Setting	Present	PG Use	Family map/ S & N questionnaire	Father's Mental Health	Father given opportunity	Addressed fathers needs	Involve fathers	Comments
HV 12	Home PN Visit	Mother & Father	Topic cards as basis of discussion	Family map -No S&N Ques - No	- How he was feeling - Changes - Coping	2 cards	Yes	Phoned before visit	- Duration 45 mins - Both parents involved - Involved fathers - showed the topic cards to the parents, asked them to pick two each. - Discussion led by the parents. - Parents individually chose the topic cards that they wanted to discuss.
HV 13	Clinic AN Visit	Mother & Father	Topic cards as basis	Family map -No S&N Ques - No	- How he was feeling - Changes - Coping	Both discussed together	Yes	Both invited	- HV spoke directly to father - Encouraged father to speak - Mother mainly chose the cards - Discussion led by parents - HV focussed on the mother and father - Discussed changes during the transition to parenthood and coping strategies.

HV 14	Clinic AN Visit	Mother & Father	Topic cards as basis	Family map -No S&N Ques - No	- Discussed with both parents	Yes, discussed benefits of father involvement	Yes	- Spoke to both parents together. - Very inclusive - Father was part of the discussion	- Very interactive session. - Both parents were able to express their concerns - Questions were directed at father which made him feel more involved. - Emphasis was put on relationship changes and mental health. - Father was concerned about coping with lack of sleep following birth. - HV discussed changes in early parenthood and coping strategies.
HV 15	Clinic AN Visit	Mother & Father	Topic cards as basis	Family map -No S&N Ques - No	- Asked how he was feeling	Asked to pick PG topics	Yes	- Spoke to both parents together. - HV asked father to pick cards that he wanted to discuss.	- Interactive - PG cards were offered - HV asked both parents to pick topics that they wanted to discuss. - Discussion led by parents - Mother and father chose topic cards (individually) that he wanted to discuss.

HV 16	Clinic AN Visit	Mother & Father	Topic cards as basis	Family map -No S&N Ques - No	- Father was asked directly about his mental health - Discussed PN needs and perinatal mental health of both parents.	- Asked to pick PG cards - Asked about his own concerns	Yes	- Spoke directly to father and asked about his own views.	- PG cards handed to parents and they were asked to choose a few together for discussion. - discussed the importance of skin-to-skin contact with father and how he could get involved once the baby is born. - Asked direct questions to both mother and father about their history of mental health. - - HV asked father many direct questions and discussed the importance of father involvement for the baby and mother.
HV 17	Home AN Visit	Mother	Topic cards as basis	Family map -No S&N Ques - No	No	Fully engaged and equally attended to	Yes	- Asked direct questions. - Father was invited to be present	- Both parents equally engaged in discussions - Father also asked direct questions by HV - Discussed parents' aspirations - Discussed life after baby and changes - Covered 3 PG cards

HV 18	Home AN Visit	Mother	Topic cards as basis	Family map -No S&N Ques - No	Not directly	Not present	N/A	Invited but not present	- Seen at home – mother only. - Father not present (in Malaysia, travels for work). - HV spread out the cards and asked mother to pick 3-4 cards. - Mother was asked about her mental health and wellbeing, and was given a questionnaire to complete with the Whooley questions and GAD2. - HV answered all questions raised by mum. - HV did not ask any questions relating to father's wellbeing or if he may have any concerns. - No discussion relating to couple relationship.

APPENDIX – 39

Characteristics of first-time father participants in study phase 3

Participant	Age	Ethnicity	Religion	1st language	Employment	Income	Education	Living with partner	Relationship with mother
F1	35-39	White other	Christian	English	Employed, working full-time	61K+	Degree or equivalent	Yes	Married
F2	40-44	White English	No Religion	English	Employed, working full-time	61K+	Master's or Doctorate	Yes	Couple relationship
F3	40-44	White other	No Religion	German	Employed, working full-time	46-60K	Master's or Doctorate	Yes	Married
F4	30-34	White Irish	Christian	English	Employed, working full-time	31-45K	Degree or equivalent	Yes	Married
F5	30-34	White other	Christian	Slovakian	Employed, working full-time	Not revealed	Degree or equivalent	Yes	Couple relationship
F6	35-39	White Welsh	No Religion	English	Employed, working full-time	46- 60K	Degree or equivalent	Yes	Married
F7	30-34	White and Black African	No Religion	English	Employed, working full-time	31- 45K	Degree or equivalent	Yes	Couple relationship
F8	35-39	White other	No Religion	Spanish	Self-employed. Own company	Not revealed	Master's or Doctorate	Yes	Married
F9	30-34	White British	Christian	English	Employed, working full-time	61K+	Master's or Doctorate	Yes	Couple relationship
F10	30-34	Any other Asian	Muslim	English	Employed, working full-time	31- 45K	Master's or Doctorate	Yes	Married

F11	35-39	Indian	Hindu	Hindi	Self Employed (full time)	61K+	Master's or Doctorate	Yes	Married
F12	40-44	White English	Christian	English	Employed, working full-time	31- 45K	Degree or equivalent	Yes	Couple relationship
F13	35-39	White English	No Religion	English	Employed, working full-time	31- 45K	Master's or Doctorate	No	Couple relationship
F14	40-44	White Scottish	No Religion	English	Employed, working full-time	46- 60K	Master's or Doctorate	Yes	Couple relationship
F15	35-39	White English	No Religion	English	Employed, working full-time	61K+	Degree or equivalent	Yes	Couple relationship
F16	30-34	Black African	Christian	French	Employed, working full-time	61K+	Master's or Doctorate	Yes	Married
F17	30-34	Half Spanish, half Lebanese	No Religion	Spanish	Employed, working full-time	31- 45K	Master's or Doctorate	Yes	Married
F18	30-34	Indian	Hindu	English	Employed, working full-time	31- 45K	Degree or equivalent	Yes	Married
F19	30-34	Indian	Jain	Gujarati	Employed, working full-time	61K+	Degree or equivalent	Yes	Married
F20	25-29	Any other mixed	Christian	English	Employed, working full-time	61K+	Degree or equivalent	Yes	Married
F21	30-34	Indian	Hindu	English	Employed, working full-time	46- 60K	Degree or equivalent	Yes	Married
F22	35-39	White English	No Religion	English	Employed, working full-time	61K+	Degree or equivalent	Yes	Married

F23	25-29	White English	No Religion	English	Employed, working full-time	46- 60K	Master's or Doctorate	Yes	Married
F24	35-39	White other	No Religion	English	Employed, working full-time	46- 60K	Master's or Doctorate	Yes	Married
F25	35-39	Indian	Hindu	English	Employed, working part-time	15-30K	Diploma or equivalent	Yes	Married
F26	30-34	White English	No Religion	English	Employed, working full-time	46- 60K	Degree or equivalent	Yes	Married
F27	25-29	White other	No Religion	Portuguese	Employed, working full-time	15- 30K	Degree or equivalent	Yes	Couple relationship
F28	35-39	White other	No Religion	Slovak	Employed, working full-time	15- 30K	Diploma or equivalent	Yes	Married
F29	40-44	White English	No Religion	English	Employed, working full-time	31-45K	Degree or equivalent	Yes	Couple relationship
F30	35-39	White Irish	Christian	English	Employed, working full-time	61K+	Degree or equivalent	Yes	Married
F31	35-39	Any other ethnic group	Sikh	English	Employed, working full-time	Not revealed	Degree or equivalent	Yes	Married
F32	35-39	White English	No Religion	English	Employed, working full-time	61K+	A Level or Equivalent	Yes	Married
F33	35-39	White English	No Religion	English	Employed, working full-time	Not revealed	Degree or Equivalent	Yes	Couple relationship
F34	30-34	White English	No Religion	English	Employed, working full-time	46- 60K	Degree or Equivalent	Yes	Married

F35	35-39	Indian	Christian	English	Employed, working full-time	5.476 - 15K	Degree or Equivalent	Yes	Married
F36	25-29	White Irish	Christian	English	Employed, working full-time	15– 30K	A Level or Equivalent	Yes	Couple relationship
F37	25-29	White Other	Christian	Romanian	Employed, working full-time	15- 30K	A Level or Equivalent	Yes	Couple relationship
F38	30-34	Indian	Hindu	English	Employed, working part-time	15- 30K	Degree or Equivalent	Yes	Married
F39	25-29	White Other	Christian	Romanian	Employed, working full-time	31- 45K	A Level or Equivalent	Yes	Married
F40	30-34	Asian British	No Religion	English	Employed, working full-time	61K+	Degree or Equivalent	Yes	Married
F41	25-29	White Other	Christian	Romanian	Employed, working part-time	15- 30K	Master's or Doctorate	Yes	Couple relationship
F42	35-39	White Other	Christian	Polish	Employed, working part-time	15-30K	GCSE level	Yes	Couple relationship
F43	30-34	White English	No Religion	English	Employed, working full-time	61K+	Degree or Equivalent	Yes	Married
F44	40-44	White English	No Religion	English	Employed, working full-time	31- 45K	Degree or Equivalent	Yes	Married
F45	30-34	Asian British	No Religion	English	Employed, working full-time	31- 45K	Master's or Doctorate	Yes	Married

Fathers who also participated in qualitative telephone interviews

APPENDIX – 40

Summary of antenatal and postnatal outcome measures – CSI, SWEMWBS, EPDS and GAD-7

Participant No.	PG Used (Intervention)		CSI		SWEMWBS (Metric score)		EPDS		GAD-7	
	AN	PN	AN	PN	AN	PN	AN	PN	AN	PN
1.	N	N	73	61	28.13	23.21	3	4	1	4
2.	N	N	71	62	19.25	19.98	7	9	2	5
3.	N	N	71	69	27.03	28.13	1	1	0	0
4.	N	**Y**	81	80	30.7	25.03	0	0	0	0
5.	N	N	81	80	32.55	35	0	0	0	0
6.	N	N	71	67	22.35	25.03	5	4	2	0
7.	N	N	80	74	23.21	26.02	9	7	6	6
8.	N	N	69	69	26.02	23.21	4	5	2	3
9.	N	N	73	47	27.03	24.11	1	0	1	3
10.	N	N	59	53	20.73	24.11	7	5	3	0
11.	N	N	71	73	25.03	26.02	4	4	0	0
12.	N	N	73	75	28.13	24.11	2	0	0	0
13.	N	N	69	63	24.11	24.11	4	9	1	3
14.	N	N	79	79	25.03	24.11	7	7	7	8
15.	N	N	76	49	26.02	19.98	9	11	2	7
16.	N	N	80	80	25.03	35	2	0	0	0
17.	N	**Y**	72	72	24.11	29.31	5	2	3	1
18.	N	**Y**	61	65	25.03	23.21	7	6	2	3
19.	N	N	65	63	30.7	26.02	1	4	0	1
20.	N	**Y**	81	74	25.03	26.02	2	1	2	1

21.	N	N	73	64	26.02	28.13	5	4	0	0
22.	N	N	75	78	25.03	24.11	3	4	4	2
23.	N	N	79	80	25.03	23.21	5	5	5	3
24.	N	N	59	65	19.98	16.88	6	19	3	14
25.	N	N	50	4	23.21	18.59	5	14	2	12
26.	N	N	79	65	25.03	25.03	10	4	7	3
27.	N	N	66	69	20.73	21.54	0	5	0	3
28.	N	N	74	81	26.02	24.11	2	2	0	0
29.	N	N	75	63	20.73	19.25	8	10	4	5
30.	**Y**	N	79	70	29.31	26.02	8	7	4	2
31.	N	N	79	81	27.03	26.02	2	3	0	4
32.	**Y**	N	74	74	29.31	28.13	2	0	1	2
33.	N	N	49	51	18.59	19.25	13	15	4	5
34.	N	N	75	77	21.54	22.35	9	7	6	5
35.	N	N	71	74	23.21	26.02	3	6	1	0
36.	N	N	68	57	25.03	24.11	5	3	3	4
37.	N	N	53	42	24.11	20.73	2	11	2	7
38.	N	N	77	72	22.35	25.03	13	7	9	1
39.	**Y**	N	79	80	29.31	26.02	1	7	4	4
40.	N	N	80	81	28.13	24.11	7	12	8	3
41.	N	**Y**	70	68	25.03	26.02	0	2	0	3
42.	N	N	53	26	26.02	19.98	7	14	2	9
43.	N	N	71	80	22.35	26.02	6	2	1	0
44.	N	N	81	81	22.35	23.21	7	5	5	5
45.	N	N	71	79	28.13	38.13	4	2	2	0

AN – Antenatal questionnaire **PN – Postnatal questionnaire**

APPENDIX – 41

Summary of antenatal and postnatal outcome measures – EQ-5D Scale (general health)

			EQ-5D-5L Subscales										EQ-5D-5L Total	
Participant No.	PG Used (Intervention)		Mobility		Self care		Usual Activity		Pain/ Discomfort		Anxiety/ Depression		EQ VAS	
	AN	PN	AN	PN	AN	PN	AN	PN	AN	PN	AN	PN	AN	PN
1.	N	N	1	1	1	1	1	3	1	1	1	2	85	67
2.	N	N	1	1	1	1	1	1	1	1	1	2	80	75
3.	N	N	1	1	1	1	1	1	1	2	1	1	85	70
4.	N	Y	1	1	1	1	1	1	1	1	1	1	85	80
5.	N	N	1	1	1	1	1	1	1	1	1	1	95	90
6.	N	N	1	1	1	1	1	1	1	1	1	1	75	80
7.	N	N	1	1	1	1	1	1	1	2	3	2	60	75
8.	N	N	1	1	1	1	1	1	1	1	1	1	90	80
9.	N	N	1	1	1	1	1	1	1	1	1	1	100	95
10.	N	N	1	1	1	1	1	1	1	1	1	1	75	90
11.	N	N	1	1	1	1	1	1	1	1	1	1	90	90
12.	N	N	1	1	1	1	1	1	2	1	1	1	95	87
13.	N	N	2	2	1	1	1	2	2	2	1	2	73	72
14.	N	N	1	1	1	1	1	1	1	1	2	2	75	75
15.	N	N	1	1	1	1	1	1	1	1	1	2	97	85
16.	N	N	1	1	1	1	1	1	1	1	1	1	80	80
17.	N	Y	1	1	1	1	1	1	1	1	2	1	88	90
18.	N	Y	1	1	1	1	1	1	1	1	1	1	80	80
19.	N	N	1	1	1	1	1	1	1	1	1	1	85	80
20.	N	Y	1	1	1	1	1	1	1	1	1	1	87	89

21.	N	N	1	1	1	1	1	1	1	1	1	1	95	100
22.	N	N	1	1	1	1	1	1	1	1	1	1	75	70
23.	N	N	1	1	1	1	1	2	1	2	1	2	85	75
24.	N	N	1	1	1	1	1	2	1	1	1	3	67	66
25.	N	N	1	1	1	1	1	1	1	1	1	2	85	70
26.	N	N	1	1	1	1	1	1	1	1	3	2	88	85
27.	N	N	1	1	1	1	1	1	1	1	1	1	96	84
28.	N	N	1	1	1	1	1	1	1	1	1	1	90	100
29.	N	N	1	1	1	1	2	2	2	2	2	2	75	60
30.	**Y**	N	1	1	1	1	1	1	1	1	1	1	93	90
31.	N	N	1	1	1	1	1	1	1	1	1	1	73	90
32.	**Y**	N	1	1	1	1	1	1	1	1	1	1	81	78
33.	N	N	1	1	1	1	1	2	1	1	3	2	73	52
34.	N	N	1	1	1	1	1	2	1	1	2	2	90	90
35.	N	N	1	1	1	1	1	1	1	1	1	1	78	82
36.	N	N	1	1	1	1	1	1	1	1	1	1	96	60
37.	N	N	1	1	1	1	1	1	1	1	1	1	100	70
38.	N	N	1	1	1	1	1	1	1	1	1	1	95	81
39.	**Y**	N	1	1	1	1	1	1	1	1	1	1	76	99
40.	N	N	1	1	1	1	1	1	1	1	1	1	98	96
41.	N	**Y**	1	2	1	1	2	2	2	2	1	1	95	95
42.	N	N	1	1	1	1	1	1	1	1	1	2	80	70
43.	N	N	1	1	1	1	1	1	1	1	1	1	75	60
44.	N	N	1	1	1	1	1	1	1	1	1	1	100	100
45.	N	N	1	1	1	1	1	1	1	1	2	1	83	80

AN – Antenatal questionnaire **PN – Postnatal questionnaire**

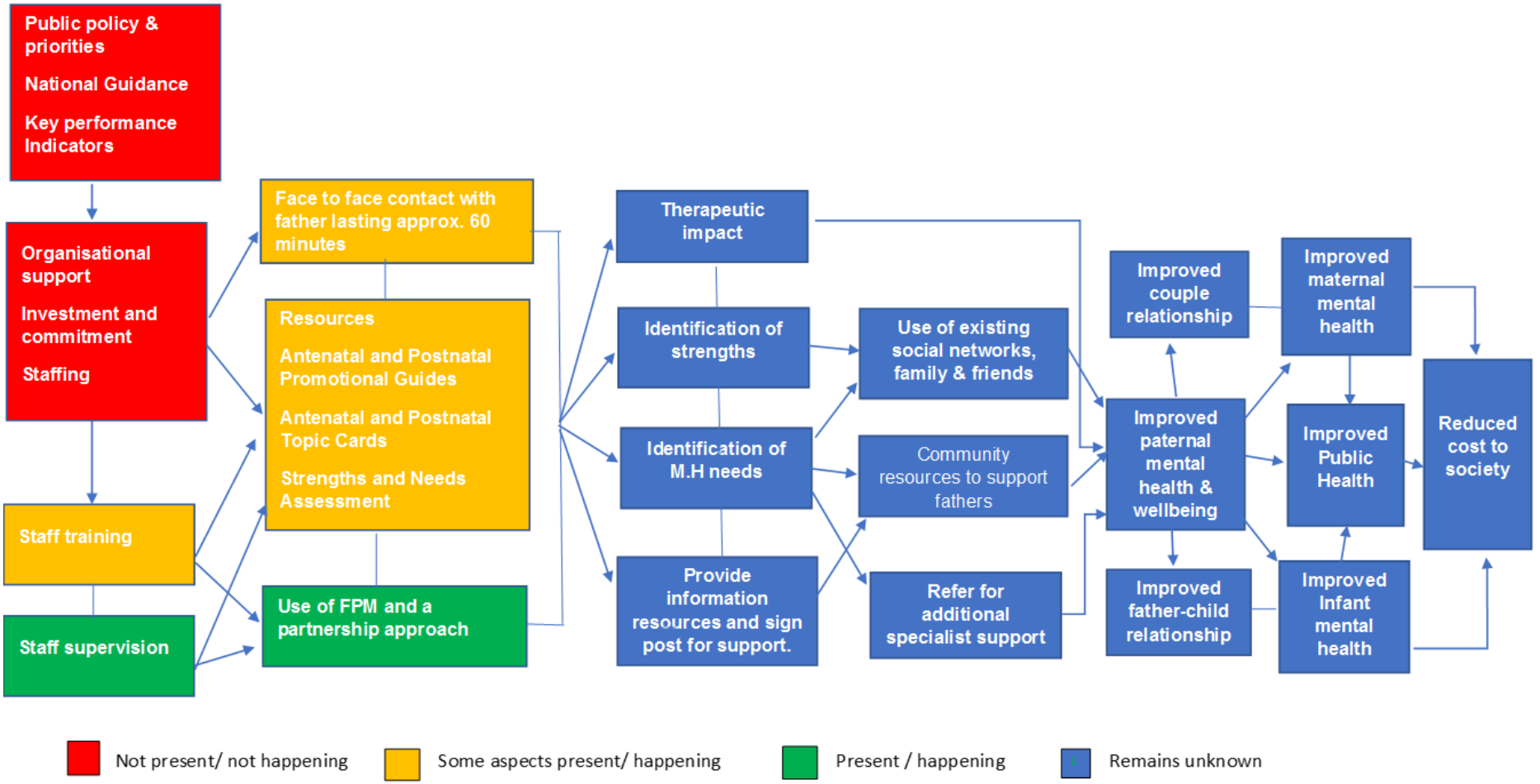
APPENDIX - 42

Criteria for Reporting the Development and Evaluation of Complex Interventions (CReDECI 2) checklist

Item	Reported on page
First stage: Development	
1. Description of the intervention's underlying theoretical basis	**79-82**
2. Description of all intervention components, including the reasons for their selection as well as their aims / essential functions	**237-243**
3. Illustration of any intended interactions between different components	**240-243**
4. Description and consideration of the context's characteristics in intervention modelling	**240-243**
Second stage: Feasibility and piloting	**245-355**
5. Description of the pilot test and its impact on the definite intervention	
Third stage: Evaluation	
6. Description of the control condition (comparator) and reasons for the selection	**N/A**
7. Description of the strategy for delivering the intervention within the study context	**29-32**
8. Description of all materials or tools used delivery the intervention	**220-239**
9. Description of fidelity of the delivery process compared the study protocol	**250-252**
10. Description of a process evaluation and its underlying theoretical basis	**303-330**
11. Description of internal facilitators and barriers potentially influencing the delivery of the intervention as revealed by the process evaluation	
12. Description of external conditions or factors occurring during the study which might have influenced the delivery of the intervention or mode of action (how it works)	
13. Description of costs or required resources for the delivery of the intervention	

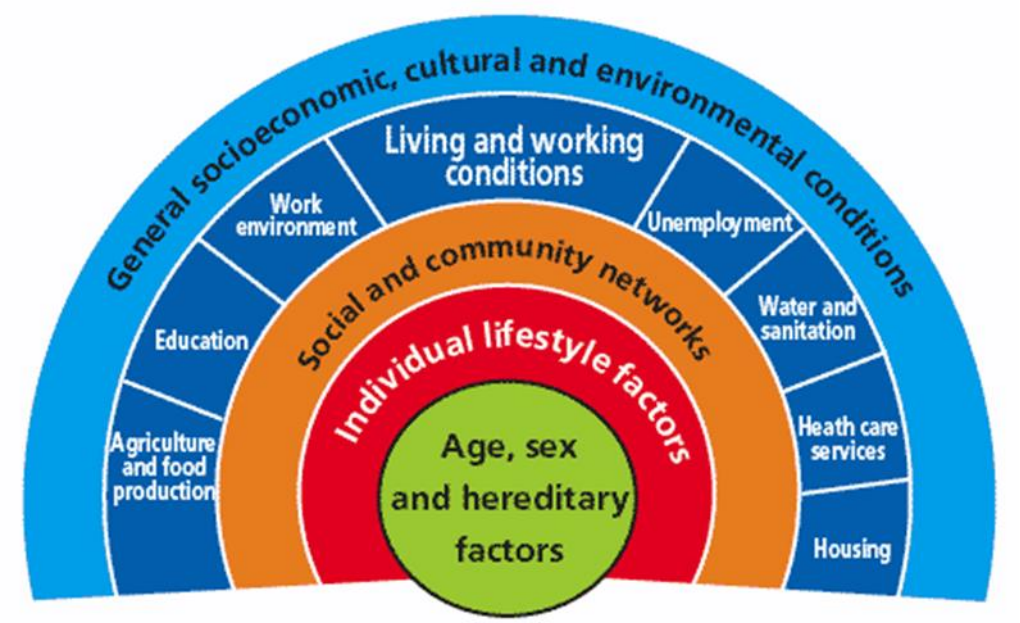
Source: Möhler, R., Köpke, S., Meyer, G. (2015) Criteria for Reporting the Development and Evaluation of Complex Interventions in healthcare: revised guideline (CReDECI 2). Trials, 16:204 DOI 10.1186/s13063-015-0709-y.

Appendix- 43 Highlighted gaps in the logic model for the implementation of the Promotional Guide System



APPENDIX – 44

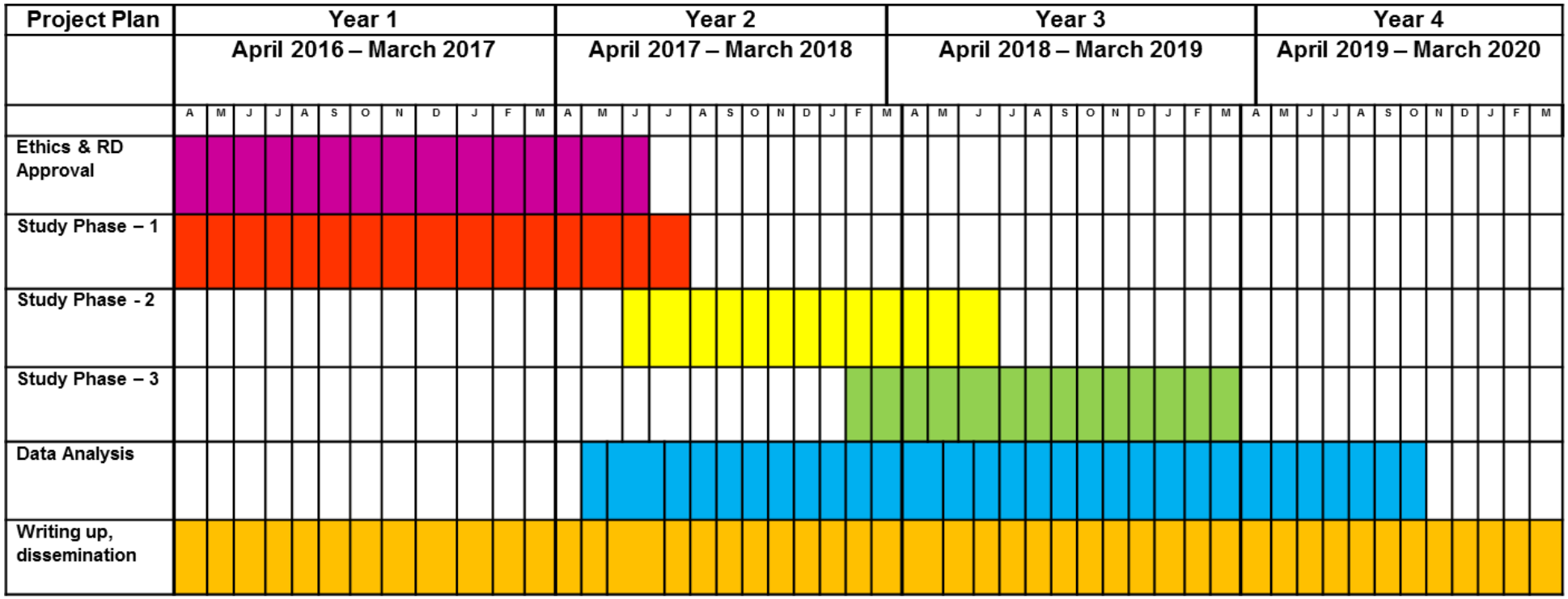
Social Determinants of Health



Source: Dahlgren G, Whitehead M. 1991. Policies and Strategies to Promote Social Equity in Health. Stockholm, Sweden: Institute for Futures Studies.

APPENDIX – 45: Gantt chart showing an overview of the PhD Study

The total duration of this Clinical Doctoral Fellowship is 4 years, April 2016 – March 2020.



APPENDIX – 46

Feedback from fathers on the qualitative paper published in study phase 2

"Fatherhood is still both enjoyable and challenging. R is doing well. I've read the report, fairly quickly. No particular thoughts, I think you've reported me accurately." [Simon]

"*Good to hear from you, I hope things are well with you. Yes, the rewarding life of fatherhood is treating me well. My little girl will shortly be 16 months old and is walking and is slowly lightening the load with her keen interest in talking, feeding herself, and dressing herself.*

Thanks for forwarding your paper, really interesting to unpack this area of early parenting. I feel the views represented were accurate for the very early stages of parenting. The shift in a relationship after three months that the article touches on is defiantly true, as there are more snapping arguments due to tiredness and with both of us back at work, we have to put more effort in not just having a transactional relationship where we list of chores that need to be done for our child's wellbeing.

It was a pleasure to contribute to your research and if you have any more questions, please feel free to get in contact" [Adrian]

"Thanks for sharing your report. It provides a very good insight about new dad's emotion and their needs" [Ali]

"Well done on producing this, I hope it is widely used!..... it's a very interesting read." [Charlie]

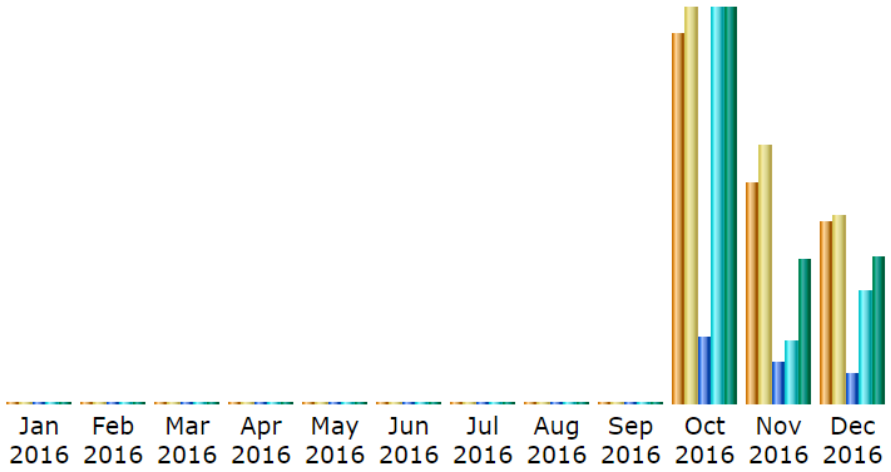
"All good and thank you. Very impressive" [Krish]

APPENDIX – 47

NEST website usage data per year between 2016 – 2019

Website usage in 2016

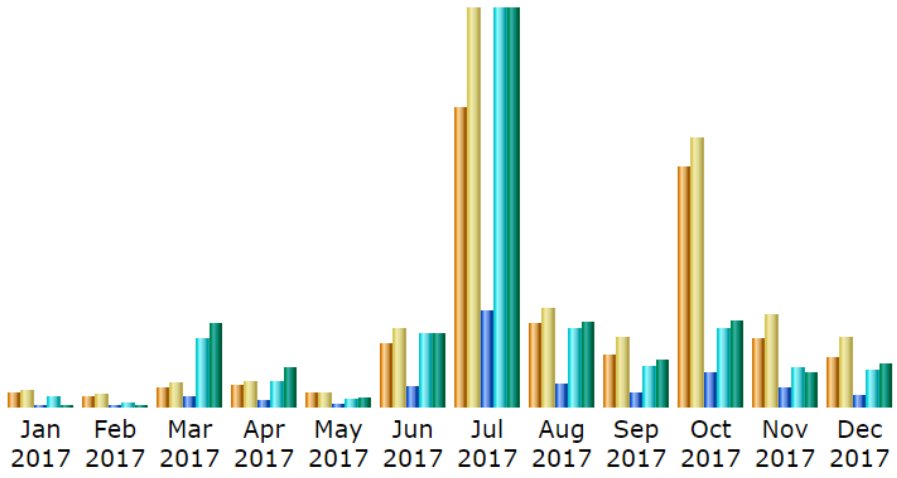
Monthly history



Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2016	0	0	0	0	0
Feb 2016	0	0	0	0	0
Mar 2016	0	0	0	0	0
Apr 2016	0	0	0	0	0
May 2016	0	0	0	0	0
Jun 2016	0	0	0	0	0
Jul 2016	0	0	0	0	0
Aug 2016	0	0	0	0	0
Sep 2016	0	0	0	0	0
Oct 2016	59	63	72	426	566.44 KB
Nov 2016	35	41	44	67	205.44 KB
Dec 2016	29	30	33	122	209.72 KB
Total	123	134	149	615	981.59 KB

Website usage in 2017

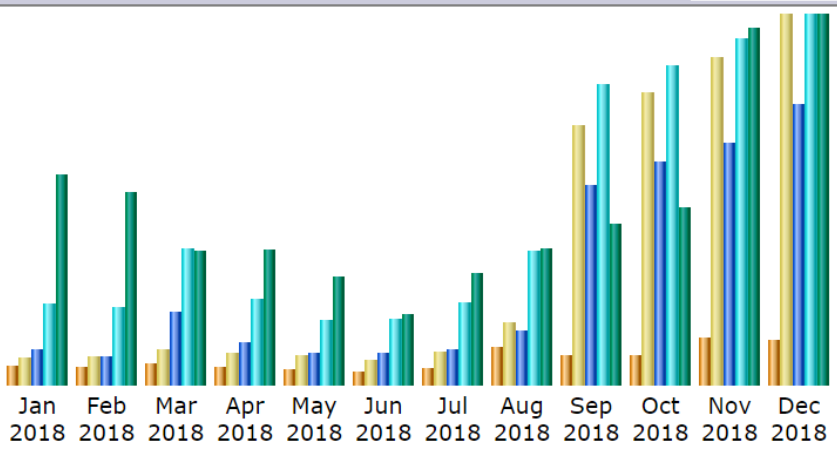
Monthly history



Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2017	37	40	41	236	333.21 KB
Feb 2017	26	28	30	76	168.09 KB
Mar 2017	45	57	227	1,611	158.73 MB
Apr 2017	52	64	135	586	74.92 MB
May 2017	35	38	61	195	19.38 MB
Jun 2017	158	199	479	1,752	143.25 MB
Jul 2017	757	1,007	2,268	9,493	765.23 MB
Aug 2017	210	247	550	1,874	162.39 MB
Sep 2017	134	174	333	957	92.75 MB
Oct 2017	609	681	840	1,849	164.59 MB
Nov 2017	171	230	423	914	63.78 MB
Dec 2017	126	174	307	859	81.24 MB
Total	2,360	2,939	5,694	20,402	1.69 GB

Website usage in 2018

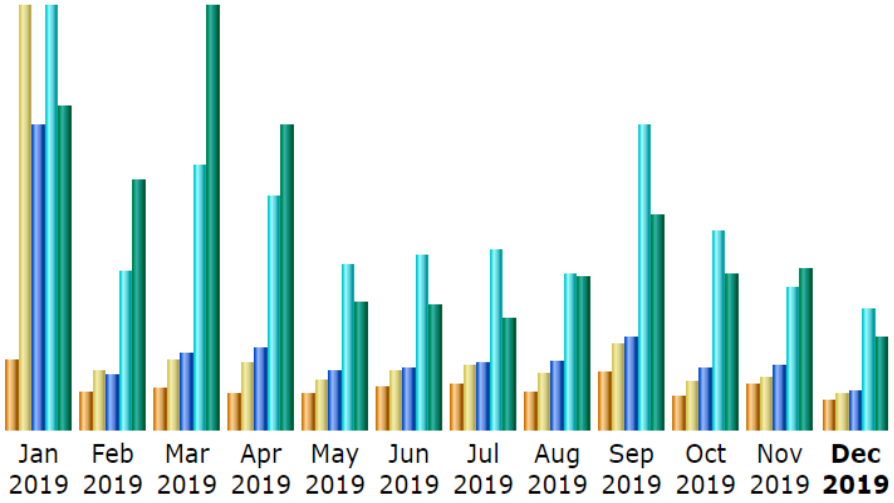
Monthly history



Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2018	117	164	351	785	65.55 MB
Feb 2018	101	160	276	747	60.00 MB
Mar 2018	125	209	713	1,339	42.06 MB
Apr 2018	100	186	420	841	41.91 MB
May 2018	90	178	307	641	33.24 MB
Jun 2018	77	146	309	647	22.25 MB
Jul 2018	102	201	358	816	35.12 MB
Aug 2018	223	367	537	1,308	42.72 MB
Sep 2018	171	1,533	1,967	2,953	50.38 MB
Oct 2018	181	1,727	2,182	3,125	55.02 MB
Nov 2018	278	1,929	2,354	3,387	110.91 MB
Dec 2018	265	2,182	2,747	3,620	114.96 MB
Total	1,830	8,982	12,521	20,209	674.12 MB

Website usage in 2019

Monthly history



Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2019	347	2,109	2,374	3,309	142.63 MB
Feb 2019	189	304	426	1,245	110.79 MB
Mar 2019	210	347	598	2,069	186.47 MB
Apr 2019	180	329	632	1,832	134.38 MB
May 2019	178	249	462	1,294	56.72 MB
Jun 2019	215	295	491	1,365	55.15 MB
Jul 2019	229	322	516	1,415	49.17 MB
Aug 2019	192	283	546	1,214	67.79 MB
Sep 2019	292	423	735	2,377	94.44 MB
Oct 2019	165	235	489	1,559	68.74 MB
Nov 2019	224	268	509	1,103	70.57 MB
Dec 2019	151	177	308	950	41.06 MB
Total	2,572	5,341	8,086	19,732	1.05 GB

APPENDIX – 48

NEST website usage data by country between 2016 – 2019

Website usage in 2016

Locales (Top 25) - Full list

Locales		Pages	Hits	Bandwidth
United States	us	54	96	270.30 KB
China	cn	20	335	322.50 KB
France	fr	16	28	79.78 KB
Ukraine	ua	13	14	58.11 KB
Russian Federation	ru	10	10	34.82 KB
Netherlands	nl	5	5	21.76 KB
Canada	ca	5	5	21.76 KB
Poland	pl	5	5	13.06 KB
Italy	it	4	26	34.64 KB
Great Britain	gb	4	23	25.21 KB
Israel	il	3	14	21.67 KB
Brazil	br	2	13	17.32 KB
Argentina	ar	1	12	12.97 KB
Japan	jp	1	1	4.35 KB
Finland	fi	1	1	4.35 KB
Germany	de	1	1	4.35 KB
Switzerland	ch	1	1	4.35 KB
Polynesia (French)	pf	1	12	12.97 KB
Greece	gr	1	12	12.97 KB
Norway	no	1	1	4.35 KB
Others		0	0	0

Website usage in 2017

Locales (Top 25) - Full list

Locales		Pages	Hits	Bandwidth
Great Britain	gb	2,561	11,689	1.13 GB
United States	us	2,006	6,136	409.08 MB
Russian Federation	ru	160	240	8.13 MB
France	fr	126	285	13.91 MB
Germany	de	107	121	688.60 KB
Canada	ca	81	154	4.95 MB
Romania	ro	79	137	11.26 MB
Israel	il	47	121	11.23 MB
Slovak Republic	sk	38	38	204.64 KB
Brazil	br	35	226	11.49 MB
Ukraine	ua	35	35	226.94 KB
India	in	35	79	247.64 KB
Switzerland	ch	34	175	28.03 MB
China	cn	32	46	2.21 MB
Denmark	dk	32	32	228.96 KB
Ireland	ie	29	95	9.74 MB
Australia	au	20	58	3.66 MB
Hong Kong	hk	20	20	51.18 KB
Czech Republic	cz	18	18	120.92 KB
Netherlands	nl	18	21	354.38 KB
Japan	jp	13	13	97.17 KB
Singapore	sg	13	81	12.47 MB
Chile	cl	12	60	6.31 MB
Italy	it	12	52	526.82 KB
Philippines	ph	10	56	3.02 MB
Others		121	414	26.41 MB

Website usage in 2018

Locales (Top 25) - Full list

Locales		Pages	Hits	Bandwidth
United States	us	9,337	10,610	124.32 MB
Great Britain	gb	1,567	7,225	458.77 MB
Russian Federation	ru	363	384	2.78 MB
Ukraine	ua	304	304	1.51 MB
Canada	ca	186	312	8.73 MB
Israel	il	129	340	35.52 MB
France	fr	125	125	386.26 KB
Denmark	dk	55	55	422.09 KB
Netherlands	nl	52	90	1.55 MB
South Korea	kr	41	55	343.25 KB
India	in	40	69	2.37 MB
Sweden	se	30	66	3.10 MB
Germany	de	30	90	7.46 MB
China	cn	30	52	1.43 MB
Norway	no	27	27	194.99 KB
Chile	cl	26	26	76.67 KB
Hungary	hu	24	25	57.04 KB
Brazil	br	15	39	1.01 MB
Poland	pl	13	13	77.67 KB
Romania	ro	12	24	1.22 MB
Dominica	dm	12	12	33.08 KB
Slovak Republic	sk	7	7	19.87 KB
Spain	es	7	31	1.68 MB
Italy	it	6	19	685.86 KB
Indonesia	id	5	18	2.09 MB
Others		78	191	18.35 MB

Website usage in 2019

Locales (Top 25) - Full list

Locales		Pages	Hits	Bandwidth
United States	us	4,081	6,026	201.52 MB
Great Britain	gb	1,743	10,039	734.88 MB
Russian Federation	ru	722	834	17.66 MB
Canada	ca	233	521	28.54 MB
France	fr	179	235	6.30 MB
Israel	il	144	344	32.08 MB
China	cn	117	262	8.30 MB
Netherlands	nl	96	96	164.93 KB
South Korea	kr	95	130	848.13 KB
Hungary	hu	58	76	930.90 KB
Sweden	se	52	52	287.77 KB
Chile	cl	47	47	133.76 KB
Ukraine	ua	43	43	204.21 KB
Germany	de	42	87	2.79 MB
Austria	at	31	31	97.95 KB
European country	eu	31	99	3.72 MB
Switzerland	ch	28	28	79.97 KB
India	in	22	90	3.05 MB
Denmark	dk	21	34	796.30 KB
Australia	au	20	40	1.78 MB
Dominica	dm	18	18	50.14 KB
Romania	ro	17	33	2.62 MB
Philippines	ph	16	35	4.21 MB
Italy	it	15	27	701.21 KB
Czech Republic	cz	14	14	44.07 KB
Others		201	491	26.20 MB

APPENDIX - 49

Blackpool
Better Start

Our Ref: CECD/MD/HC
Direct Line: 01253 476789
Email: merle.cecd@nspcc.org.uk
1st July 2019

Dear Shon

I am writing to express my appreciation to you for supporting our Talking Dads Conference. I realise that you have an exceptionally busy diary and wanted to thank you for all your efforts in helping us to make the event such a success.

Your keynote presentation was excellent and it provided many delegates with an opportunity to develop their understanding of new fathers' experiences and well being needs.

Feedback from the delegates was very positive, with 96% of delegates stating that they both agreed or strongly agreed that the content was both well presented and provided information which was relevant and applicable to their work.

I'm sure you'll agree engagement on Twitter was also very positive and really helped to raise awareness of International Fathers Mental Health Day.

I do hope that you enjoyed the day too, and that you were able to speak to some of our enthusiastic delegates.

With kind regards and many thanks.

Yours sincerely

Merle Davies
Director
Centre for Early Child Development

Merle Davies, Director
Centre for Early Child Development, Number One, Bickerstaffe Square, Talbot Road, Blackpool, FY1 3AH
/BetterStartBpl @CECDBlackpool www.blackpoolbetterstart.org.uk

APPENDIX - 50

Mental health of first-time fathers – it's time to put evidence into practice (Final Accepted Manuscript)

Recently, there has been an increased global policy focus on the need to improve the mental health and wellbeing of the general population; addressing mental health needs has been highlighted as a priority in European health and social agenda[1] and by the World Health Organization.[2] In line with this, mental health and wellbeing during the perinatal period is attracting more attention. New parenthood can be stressful, and adjustments to lifestyles, routines and relationships can affect the mental wellbeing of both parents.

Our systematic review on first time fathers' mental health and wellbeing[3] revealed that fathers wanted more guidance and support to prepare them for parenthood, specifically to better prepare them for subsequent relationship changes with their partner. Fathers need to have access to tailored information and to be equally included in consultations and contacts with relevant health professionals. The findings of this synthesis of the international evidence have important implications for maternity and early years services, with particular reference to the need to consider the mental health and well-being of mothers *and* fathers.[3] The review also highlighted that healthcare professionals need a greater understanding of the dilemmas and challenges new fathers face to better support their mental health and wellbeing during this crucial transitional period.[3]

Historically, research on perinatal mental health has focused on women, with clear evidence of the longer-term adverse impacts of poor mental health during and after pregnancy on the woman, her child and the wider family.[4] A recent report concluded that perinatal mental health problems carried a total economic and social long-term cost to society of about £8.1 billion for each one-year cohort of births in the UK.[5] This assessment was based on costs relating to maternal perinatal mental health and included estimates for adverse effects on the child as well as the mother, but not the father.[5] While the actual cost of paternal perinatal mental health problems is currently unknown, it is likely to be similarly considerable.

Depression has been reported in 8-10.4% of fathers between the first trimester of their partner's pregnancy and one year postpartum.[6, 7] Similarly, 16% of men suffer from anxiety in the antenatal period and up to 18% in the postnatal period.[8] In reality these figures may be much higher as screening tools used to identify maternal mental health problems may be less reliable when applied to men.[9]

As men become fathers, they face some of the same challenges as women with adapting to parenthood, with potential negative consequences for their mental health and wellbeing. In a recent UK study by Darwin et al.,[10] one father described

his experience of increased stress related to new fatherhood as being triggered by "never having any time to relax" and "the non-stop-ness of it". New fathers report difficulties balancing the competing demands of family, work and their own needs, and struggling with impaired relationships and breakdown in communication with their partners following their baby's birth.[11] Evidence is now accumulating that poor maternal and paternal mental health similarly impact on a child's development. Depression in fathers is associated with higher levels of emotional and behavioral problems in children,[12] and poor educational achievement.[13] Despite increasing evidence of perinatal consequences for men's mental health, fathers continue to report being marginalized by the maternity and early years services.[14,15] The UK National Institute for Health and Care Excellence guidelines on antenatal and postnatal mental health recommend routine mental health assessment of pregnant and postnatal women, however no mention is made of the mental health and wellbeing of fathers and no practice recommendations relevant to father's mental health needs are included in the guidance.[16] That awareness of maternal mental health needs is being addressed by the relevant UK services is commendable, however men's mental health needs continue to be neglected, despite them also having to deal with the roles, responsibilities and challenges of new parenthood.

In the absence of inclusion in routine care, men should be directed to other sources of support and advice. Despite this, our review found wide gaps in provision , many fathers did not have access to tailored information resources nor were their needs generally acknowledged by health professionals.[3] Evidence from our systematic review adds further support for urgent review of how we plan, provide and resource maternity and early years services, in order to recognize the impact pregnancy and birth may have on a father's mental health, as well as the essential role fathers play in supporting their partner and infant. If the aim of health research is to improve outcomes through the implementation of evidence and use of evidence-based practices, we should ask ourselves why barriers persist to address and recognize paternal mental health needs. Now is the time to use this evidence to change practice towards supporting both parents and provide more equitable care and use of resources.

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Evidence from a systematic review on first-time fathers' mental health and wellbeing needs

› Abstract

While the importance of addressing maternal mental health needs are more widely recognised, with routine mental health screening and assessment offered to women during and after pregnancy, men who have been asked about their experiences of parenthood report feeling marginalised and unacknowledged by health professionals during the perinatal period, and a lack of appropriate information on pregnancy, birth, child care, and balancing work and family responsibilities. This article considers the findings of a recent systematic review on first time fathers' mental health and wellbeing needs, and discusses practice implications for health visiting services.

Key words
› Fathers › Mental health › Wellbeing › Health visitors › Transition to parenthood › First-time fathers

It is well documented that becoming a parent can be a challenging time for women and men, with the transition to parenthood impacting on aspects of their health and wellbeing during and beyond the perinatal period. Although more focus has been placed on the consequences of maternal mental health for the woman and her child, of more concern recently is evidence that a child's exposure to poor paternal mental health can also have a negative impact on their behaviour and development. Despite this, evidence of mental health needs in fathers and interventions to support new fathers is lacking.

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Why is this important?

Depression in fathers has been associated with higher levels of emotional and behavioural problems in children at around 3 years of age, particularly in boys (Ramchandani et al, 2005). In a later study, Ramchandani et al (2008) also reported an increased risk for psychiatric, behavioural, and conduct disorders in children at 7 years of age, if their fathers had been depressed in the antenatal and postnatal periods.

A more recent study of over 3000 families in Bristol identified a link between postnatal depression in men, as assessed using the Edinburgh Postnatal Depression Scale (EPDS) and an increased risk of depression in their teenage daughters at age 18 (assessed using International Statistical Classification of Diseases and Related Health Problems, Tenth Revision codes) (Gutierrez-Galve et al, 2018). Fathers' mental health during and beyond the perinatal period is therefore an area that requires greater attention from health professionals.

The systematic review

We undertook a systematic review of qualitative evidence through the Joanna Briggs Institute (JBI) (http://joannabriggs.org/) to identify and synthesise the best available evidence on first time fathers' experiences and needs in relation to their mental health and wellbeing (Baldwin et al, 2018). The objectives, inclusion criteria and methods of analysis were specified in advance in a protocol, published in the JBI Database of Systematic Reviews and Implementation Reports (Baldwin and Bick, 2017). The protocol was also registered with PROSPERO (PROSPERO 2016: CRD42016052685).

The review included 22 studies from eight countries: UK, Sweden, Australia, Canada, USA, Japan, Taiwan and Singapore. The studies were published between 1990 and 2017, and only included resident first-time fathers of healthy babies. Qualitative data were extracted from the included papers using a standardised JBI data extraction tool (Baldwin and Bick, 2017) and research findings pooled using JBI System for the

Unified Management, Assessment and Review of Information (JBI SUMARI).

Evidence from the review revealed three main factors that affected first time fathers' mental health and wellbeing:

- The formation of the fatherhood identity
- Competing challenges of the new fatherhood role
- Negative feelings and fears relating to it.

Fathers reported role restrictions and changes to their lifestyles following the birth of their baby which often increased their levels of stress. Other pressures related to not knowing how to be a 'good father' or how to 'get it right' or not knowing what to expect from fatherhood. Fathers described difficulties balancing conflicting demands of work and spending time with the baby, deterioration in their relationship with their partner and difficulties in bonding with their new baby. The increased feelings of stress fathers experienced often manifested as tiredness, irritability and frustration, for which many men used denial or escape activities, such as smoking, working longer hours or listening to music, as coping techniques.

Fathers expressed the need for more guidance and support to prepare them for impending fatherhood, and importance of prior knowledge that having a baby could impact on aspects of their relationship with their partner. They also wanted a variety of support systems to include parenting groups, father-friendly resources and father-inclusive services. The main barriers to accessing support were a lack of resources specifically aimed at fathers (even if a father had sought support for their mental health, it was not available). Men were often not viewed or treated as equal partners, with findings with respect to feeling a lack of acknowledgment or involvement by health professionals during their transition to fatherhood supporting earlier studies. Many fathers who felt ignored by health care professionals providing maternity and early years care described feeling like a 'spare part' (Darwin et al, 2017: 6) or 'made out to be a complete idiot' (Rowe et al, 2013: 49).

Based on the review findings, the following recommendations were developed for health professionals, with a view to enhancing practice:

- Health professionals should routinely inform and educate expectant first-time fathers about the changes and challenges they may experience during their transition to fatherhood, and offer information on where they could access appropriate resources and support
- First-time fathers should be routinely encouraged to attend antenatal appointments. Information shared with fathers should include topics such as the importance of attachment with their new baby, and how they can bond with their baby, including role of 'skin-to-skin' contact
- Health professionals should offer fathers-to-be information on the labour and birth process, and how they could be involved in supporting their partner
- Informing first-time fathers about the importance of their involvement in their child's development, and how rewarding this could be to them, could encourage new fathers to develop skills and self-confidence in their parenting
- Health professionals need to be aware of the signs, symptoms of mental health difficulties in new fathers and their coping mechanisms, which may differ to those displayed by new mothers

'Fathers expressed a need for more guidance and support to prepare them for impending fatherhood, and the importance of prior knowledge that having a baby could impact on aspects of their relationship with their partner'

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'During routine contacts, health visitors can highlight the importance of good attachment and discuss the important role of the father in relation to encouraging positive infant and child development'

- New fathers should be offered adequate support and access to resources aimed at preventing stress and improving mental health. Where necessary health professionals should make appropriate referrals for fathers to other professionals during the perinatal period to address their mental health needs
- If appropriate, health professionals should focus on couple relationships, including potential changes to sexual relations, and discuss the importance of this with both parents
- Health services need to adopt a father-inclusive model for supporting new parents so that fathers feel acknowledged and adequately supported at each contact with the maternity and early years services.

Implications for health visitors

These recommendations have important implications for health visiting practice. Health visitors have a unique role in working with parents and children to promote health and prevent illness, which places them in an ideal position as 'family workers' to support and prepare first-time fathers for their transition to fatherhood. Health visitors through their holistic, family centred approach can enable early identification of needs and risk; and provide appropriate information and early intervention.

The national *Healthy Child Programme* (Department of Health (DH), 2009; Public Health England (PHE), 2015) places a major emphasis on parenting support, specifically concentrating on supporting strong couple relationships, supporting the transition to parenthood and engaging with fathers. The antenatal period is a critical time to engage with families to support them to achieve the best possible outcomes for their child, assess the health and social care needs of the family and levels of support needed after the birth, and discuss the transition to parenthood.

Through routine universal antenatal contacts, health visitors can discuss the changes and challenges of new parenthood and explore parental expectations with parents. This is also a good opportunity to provide fathers with information about labour and birth (such as what to expect, what happens when things go wrong, how long it may last), as well as advice about how they could feel involved during this process. To engage with fathers in the antenatal period however, it is important they are exclusively invited to attend these appointments. If fathers know that the appointment is for both parents, they may be more likely to attend and less likely to feel excluded from discussions about their partner's pregnancy progress and plans for the birth and beyond.

During these contacts, and the routine new birth visit (10–14 days after birth), health visitors can discuss perinatal mental health with parents, especially anxiety and depression, the most common mental health disorders during the perinatal period. Discussions should include the signs and symptoms of anxiety and depression, so both parents are aware of the need to seek help, and who to seek help from, if they notice the onset of signs and symptoms of mental health problems in themselves or their partners. This is also an opportunity to discuss activities to promote positive mental health and wellbeing, such as: exercise, healthy diet, rest and relaxation, and avoidance of negative coping strategies, which health visitors are well placed to do. Providing fathers with details of local support groups, such as fathers' groups (often run in children's centres at weekends) or national helplines for advice and support, will make fathers aware of the various services and resources that are available both locally and nationally, encouraging better access.

Health visitors have an important role in promoting parental bonding with their new baby. During routine contacts, health visitors can highlight the importance of good attachment and discuss the important role of the father in relation to encouraging positive infant and child development. If fathers are aware of the positive impact of their involvement, this could encourage them to spend more time with their child. Having these discussions with expectant parents during the antenatal contact and offering practical tips on how to bond with their unborn baby during the pregnancy and in the early days and months following birth could be beneficial to helping fathers develop their parenting skills.

In addition to ensuring new fathers are supported in developing their parenting skills, it is important that health visitors are also aware of the importance of supporting first time fathers develop an awareness of the potential impact of having a baby on their relationship with their

partner. According to Coleman et al (2013), 'Health visitors are in a prime position to discuss relationship issues and offer support to parents'. As part of their role, health visitors are trained to recognise the signs of relationship distress, respond effectively to offer support and review and refer to more specialist services as necessary (Mitcheson, 2015). The universal antenatal contact and the postnatal contacts at 10–14 days, and 6–8 weeks after birth provide ideal opportunities for these discussions to take place.

Discussing couple relationships are also an integral part of universal intervention programmes commonly used by health visitors in England, such as Promotional Guides and Maternal Early Childhood Sustained Home-visiting (MECSH) programme. Funded by the Department of Work and Pensions in 2015, OnePlusOne produced a guidance for health visitors for 'Supporting Couple Relationships', placing them in a unique position to offer relationship support across all domains of health visiting practice (www.oneplusone.org.uk/wp-content/uploads/2015/09/HV-Training-v9a.pdf). This therefore means that health visitors are ideally placed to discuss couple relationships, including potential changes to sexual relations with both parents.

To be able to support fathers' mental health and wellbeing in an appropriate and timely manner, health visitors need to be aware of the signs and symptoms of mental difficulties in new fathers, and their coping mechanisms. Some signs and symptoms of depression during the perinatal period experienced by women and men are similar, such as low mood, deep feelings of abandonment, anhedonia and powerlessness, however other symptoms such as an increase in tobacco smoking, alcohol and substance abuse, may more frequently manifest in men (Madsen, 2011). Health visitors also need to be aware of local and national support services and resources specifically available for fathers (such as these: www.newdadstudy.com/resources.html), so that they can share them with parents during this contact.

Health professionals' relatively limited experiences of working with first-time fathers, and inability to assess and recognise mental illness in fathers' have been reported previously (Massoudi, 2013; Hammarlund et al, 2015). In a small qualitative study of two focus groups, each comprising of six UK health visitors from one NHS trust, a number of anxieties were highlighted relating to the lack of support they provided to fathers (Whitelock, 2016). These included:

- A lack of training on working specifically with fathers
- A lack of training with regard to working with men who have poor mental health
- Fears for their own safety when attending contacts with fathers
- A lack of confidence working with fathers
- Busy caseloads and time factors
- Health visitors being perceived as a 'mother and child' service
- A lack of direction with regard to screening men in the trust's workplace policies (Whitelock, 2016).

Similar themes were highlighted in another qualitative study, this time focusing on student health visitors, who felt that as paternal mental health was not addressed in their training they were inadequately prepared to support fathers in practice (Oldfield and Carr, 2017). These studies and our systematic review highlight an important training need if health visitors are to address how they involve and work with fathers. There have been suggestions that having a workforce that is primarily female could act as a barrier to engaging fathers, as men may be more willing to engage with male staff or think of health visiting as service which is 'not for them' (Page et al, 2008). This would apply to the UK midwifery workforce which is 99% female and the health visiting workforce which is 99.6% female (DH, 2012). However, recommendations from a large literature review funded by the Movember Foundation suggests that staff characteristics, skills and qualities such as being non-judgemental, male positive and empathic to men's needs are far more important than the gender of the staff (Robertson et al, 2015). In order to work successfully with fathers, practitioners have to consider addressing fathers' needs as men, as well as fathers (similar to the way in which a family-focused approach is used with women) and not just as child carers (Ghate et al, 2000).

Being able to address first-time fathers' mental health needs is particularly important for health visitors in light of the recent announcement to support fathers, which has been described as a 'landmark move' by NHS England. According to the NHS *Long Term Plan*, 'Fathers/partners of women accessing specialist perinatal mental health services and maternity outreach clinics will be offered evidence-based assessment for their mental health and signposted to support' (NHS, 2019: 49). How this support will be delivered and how the workforce will be prepared is yet to be seen. From a policy perspective, while this

Key points

- Fathers' mental health during the perinatal period is an area that requires greater attention from health professionals
- Health visitors are ideally placed to support both parents' mental health and wellbeing during their transition to parenthood
- During routine contacts with parents, health visitors can discuss the changes and challenges of new parenthood, signs and symptoms of perinatal mental health disorders and promote parental bonding with their baby
- To engage and work successfully with fathers, health visitors need to address fathers' needs as men as well as fathers, and not just as child carers
- Health visitors need to adopt a father-inclusive model for supporting new parents so that fathers feel acknowledged and adequately supported during their transition to fatherhood

is a move in the right direction for fathers, this will only support the small number of men at increased risk of perinatal mental health difficulties.

Evidence from our systematic review adds further support for an urgent review of how universal services are planned and resourced in order to adequately meet the mental health and wellbeing needs of all fathers during their transition to fatherhood (Baldwin et al, 2018). It is crucial for health services to adopt a father-inclusive model for supporting new parents so that fathers feel acknowledged and adequately supported, which in turn would benefit the health and wellbeing of the whole family. HV

This article has been subject to peer review.

The full systematic review can be accessed at: https://journals.lww.com/jbisrir/Fulltext/2018/11000/Mental_health_and_wellbeing_during_the_transition.10.aspx

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APPENDIX – 52

Dissemination of NEST through online blogs, social media and radio interviews

The following dissemination activities were undertaken to emphasise the importance of focusing on fathers' mental health during their transition to fatherhood and to raise awareness of NEST.

- Online blog for the Maternal Mental Health Alliance
  19th June 2017
  Title: 'Putting fathers in the picture'
  https://maternalmentalhealthalliance.org/putting-fathers-in-the-picture/

- Online blog for the Institute of Health Visiting
  19th June 2017
  Title: Fathers' mental health matters
  https://ihv.org.uk/news-and-views/voices/fathers-mental-health-matters-intfathersmhday/

- You tube video interview for Fathers Reaching Out
  23rd May 2017
  Title: Sharin Baldwin Talks to Fathers Reaching Out
  https://www.youtube.com/watch?v=rKVcdFxCv8c

- Radio interview for Talk Sport
  23rd May 2018
  Title: Being a new dad
  Aired on radio on the 'Kick off' programme on 23rd May 2018

APPENDIX – 53

Good Practice Points for Health Visitors

Institute of Health Visiting
Excellence in Practice

Engaging with fathers

The National Healthy Child Programme (PHE, 2015; DH, 2009) puts a major emphasis on parenting support, specifically concentrating on supporting strong couple relationships, supporting the transition to parenthood and engaging with fathers.

The period from conception to the age of 2 is an important time for child development, and experiences during this period can influence the rest of the child's life. Fathers who are affectionate, supportive and involved, contribute positively to their child's cognitive, language and social development, and can positively influence their child's social, academic and economic wellbeing. Fathers also play a crucial role in supporting the health and wellbeing of mothers, and close bonds between fathers and their children are linked to positive outcomes for fathers themselves.

Positive father involvement and perceived support with child care and household tasks are associated with lower levels of stress and depression in mothers (Fisher et al, 2006; Pilkington et al, 2015). Mothers also feel more confident and capable about breastfeeding when their partner is supportive and involved, and breastfeeding is likely to be more successful (Mannion et al, 2013). This GPP seeks to raise awareness of the importance of health visitors engaging with fathers.

If fathers are not well themselves, this can impact negatively on the whole family. Depression in fathers is associated with high levels of emotional and behavioural problems in their children, as well as negative impacts on their educational achievement (see iHV Good Practice Point about Understanding Fathers' Mental Health & Wellbeing during their transition to fatherhood).

Health visitors and health visiting team members are ideally placed to support fathers, as well as mothers, during their transition to parenthood. For this to happen, effective engagement is necessary. While UK policies, such as the Healthy Child Programme, outline good practice for engaging fathers, in reality there is a gap in achieving this in practice as highlighted by Baldwin et al, 2018.

Research suggests that fathers continually feel excluded and marginalised by health professionals and health services. For example, research into midwifery services has shown that men often feel that their questions and opinions are ignored by midwives (Dheensa et al, 2013), while health visiting is often perceived as a service provided by women, for women (Williams et al, 2013) or for the mother and child only (Whitelock, 2016). A recent qualitative systematic review of 22 studies published between 1990 – 2017 found that fathers wanted more guidance and support around the preparation for fatherhood, and relationship changes with their partner (Baldwin et al, 2018; Baldwin and Bick, 2018). Barriers to accessing support included lack of tailored information, resources and acknowledgment from health professionals, highlighting the need for health professionals to better engage with fathers (Baldwin et al, 2018).

Before health visitors can work effectively with fathers, they need to be able to make contact with them and meet them. Therefore, fathers should be invited to be present with mothers at visits. This should be routine practice, as being 'family workers' means including both parents and not just the 'mother'.

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For additional resources see www.ihv.org.uk

The information in this GPP was updated on 08/08/2019 and will be reviewed again in 08/2021 and when new evidence becomes available.

Engaging with fathers

Good practice points for health visitors

- Non-resident fathers can make valuable contributions to their children too, through positive relationships and high levels of involvement. Health professionals should engage with non-resident fathers through the mothers.
- If fathers exclude themselves from a visit, 'circular questioning' could be a way to include the 'voice of the dad'. So, instead of asking the mother what does dad do/think/ feel…? We can ask: 'If I was to ask X (use his name) what he thought/did/felt etc., what do you think he would say?' If he is physically absent, this is a way of 'bringing him into the room'; if he is present but not engaged, then this gives a starting point for engagement (Standish, 2012).
- The Antenatal and Postnatal Promotional Guides are a good way to engage with fathers during the antenatal and postnatal contact. This intervention aims to enhance parental capacity (of both mothers and fathers) and change parenting attitudes and practices in a non-judgemental and supportive manner (Davis and Day, 2010).
- Health professionals do not need to be men to deliver effective services to fathers. Instead they need to be professional, have the ability to communicate effectively and use a strengths-based approach to improving and promoting health – all the skills that health visitors already use when working with mothers.
- Organisational support is a key aspect to effectively engaging with fathers. For example:
  - all service policies and guidelines need to be written with both parents in mind (mothers and fathers)
  - there need to be systems in place for collecting and recording data and health information about fathers
  - all service user audits and evaluations need to include the views of fathers too and disaggregate reported findings by gender.

  In addition to this, while some health visitors relate to the fathers effortlessly, others may need training and/or support to develop the skills, knowledge and confidence to work effectively with fathers.
- Better links and awareness of services specifically for fathers locally should be promoted such as resources identified on www.newdadstudy.com

Top ten tips for effectively engaging with fathers and supporting the transition to parenthood

F ather	Use the 'F' word when inviting fathers to appointments or advertising services. The word parent is often perceived as meaning mother. Therefore, be careful to mention fathers specifically.
A ppointments	Ensure that fathers are explicitly invited to appointments, as they are more likely to attend if there is an expectation for them to be present. This may mean you have to be flexible with the timings of the appointment, although with sufficient advance warning, many can fit in with your schedule.
T ransition	Discuss the neurobiological, social and emotional changes experienced by both men and women during the transition to parenthood and help them explore ways in which they can support each other.
H elp	Inform fathers about infant and child development - how their baby is growing, and how they can help their child to develop.
E xplore	Explore the expectations of both the mother and father in relation to the changes in gender roles, mentioning greater involvement in caregiving by today's fathers and changes in paternity entitlements.
R ewarding	Help fathers see how rewarding engaging with a baby can be. Encourage new fathers to take care of their babies and develop skills and self-confidence. Point out that this is important for their child's development, including developing their IQ.
H ealth needs	Always address fathers' health needs as men and fathers, just as you would with mothers. This includes recording their names and health details. You will need to ensure that your electronic recording systems are designed to incorporate fathers.
O ffer	Offer fathers information resources that are tailored to address their needs, and resonate with their experiences. The style and language used can make a significant difference to successfully engaging men. For example: using terms such as 'activity' rather than 'health'; 'regaining control' rather than 'help-seeking' is more likely to make fathers engage with you.
O rganisation	Lead on service and organisational change to adopt a father-inclusive model for health visiting. Having senior management support is crucial to its success and sustainability.
D evelop	Develop father-inclusive resources or services by including fathers in the developmental stages of the programme as this is likely to improve engagement and outcomes. Always seek feedback from fathers about their experience.

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Engaging with fathers

Additional Reading:

Department for Work and Pensions:
Collaborative parenting: Barriers faced by separated fathers
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/193339/rrep815.pdf

Institute of Health Visiting Parent Tips:

Understanding Fathers' Mental Health & Wellbeing during their transition to fatherhood
https://ihv.org.uk/for-health-visitors/resources-for-members/resource/understanding-fathers-mental-health-wellbeing/

The Fatherhood Institute:

Ten top tips for attracting fathers to programmes
http://www.fatherhoodinstitute.org/wp-content/uploads/2014/11/Ten-top-tips-for-attracting-fathers-to-programmes.pdf

Engaging Fathers in their Children's Learning: tips for practitioners
http://www.fatherhoodinstitute.org/2005/engaging-fathers-in-their-childrens-learning-tips-for-practitioners/

Making the least of fathers: five common mistakes
http://www.fatherhoodinstitute.org/wp-content/uploads/2014/11/Making-the-least-of-fathers-Five-common-mistakes.pdf

Guide to developing a father-inclusive workforce
http://www.fatherhoodinstitute.org/uploads/publications/460.pdf

Working with Men:

A Fathers' Development Programme Summary and Key Recommendations
http://workingwithmen.org/FD_Summary.pdf

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APPENDIX – 54

Good Practice Points for Health Visitors

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Understanding father's mental health & wellbeing during their transition to fatherhood

Men go through a multitude of complex changes when they become fathers, making the transition to fatherhood a particularly important, yet vulnerable, time in a man's life. The prevalence rate of depression in men both pre- and postnatally was reported as 10.4% in 2010 (Paulson and Bazemore, 2010), and as 8.4% in 2016 (Cameron et al, 2016) in two separate meta-analyses.

A recent systematic review of twenty-two studies from eight different countries reported a number of challenges that new fathers faced, which included:

- **Pre-birth / antenatal period**
  - Specific fears relating to their partner's labour and birth
  - Difficulty to bond with baby in utero
- **Postnatal period**
  - Balancing work with the time they spent with their child
  - Deterioration in their relationship with their partner, which included reduced satisfaction with their sexual relationship.
  - Expectations of new fathers not meeting reality, especially in relation to breastfeeding and bonding. New fathers found breastfeeding to be more difficult than anticipated, and many struggled to bond with their babies in the early days following birth
- **Throughout the perinatal period**
  - Increased worries about the wellbeing of their partner and baby

(Baldwin et al, 2018)

As part of every contact, HVs should routinely enquire about fathers' mental health and wellbeing, and offer appropriate support and advice to fathers, as well as mothers.

Factors that are linked with paternal depression in the postnatal period:

- a history of depression;
- unsupportive marital relationships;
- unemployment;
- unplanned pregnancy;
- social deprivation.

HVs need to have a good understanding of gender-specific differences between mothers and fathers in order to provide the right support to fathers. Men have specific risk factors for mental distress in the postnatal period, which may manifest as

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The information in this GPP was updated on 12/06/2019 and will be reviewed again in 06/2021 and when new evidence becomes available.

hostility, conflict, and anger, rather than the more broadly recognised sadness (Condon et al, 2004). Fathers may withdraw or engage in escape activities such as overwork, excessive smoking, sports, sex, or gambling and may self-medicate for their depression by drinking alcohol (Baldwin et al, 2018; Veskrna, 2010).

It is imperative that HVs assess fathers' mental health as well as mothers, as part of their role of 'family workers', this will have direct benefits for the father and will help achieve the best outcomes for children too. The mental health of fathers has an impact on the child's cognitive, social and behavioural development (Goodman, 2004). Ramchandani et al, (2005), in a prospective cohort study, found that severe postnatal depression in fathers was associated with high levels of emotional and behavioural problems in their children at age 3.5 years, particularly in boys.

Good practice points for health visitors

- Routinely ask fathers about their experience of becoming a father at the antenatal and new birth visit and explore feelings and expectations.
- Discuss the complex changes that men may go through during the transition to fatherhood, allowing fathers to open up about any difficulties that they may be experiencing.
- Offer information on where fathers could access appropriate resources and support for their own mental health and wellbeing.
- Educate both mothers and fathers about perinatal mental health problems so that they are able to access help if they notice any of the signs and symptoms in themselves or their partners.
- If the mother is depressed, ensure that the father has adequate support systems in place as depression in one parent is more likely when the other is depressed.
- Discuss activities that promote positive mental health and wellbeing, such as: exercise, healthy diet, rest and relaxation, avoid negative coping strategies, and discuss how the couple/family can support one another.
- Routinely assess fathers' mental health and wellbeing, as well as mothers' during all antenatal and postnatal contacts. This is particularly important 3-6 months after birth, where the risk of depression in fathers is higher than other periods.
- It is very important that fathers are enabled to seek help if they are suffering from mental health problems. Help is available in different forms including self-help advice, talking therapies, such as cognitive behavioural therapy (CBT), and antidepressant medication.
- Fathers could also be given the following self-help measures/advice to improve their mental health and wellbeing following birth and reduce the risks of postnatal depression (Baldwin and Kelly, 2014):
  - Recognise that you may sometimes feel down or low about being a parent.
  - Allow time for yourself, away from work and family.
  - Make sure to talk to your partner, family and friends about how you are feeling.
  - Focus on the enjoyable aspects of parenting.
  - Try to maintain any important hobbies or social events.
  - It is also important to avoid negative coping strategies, such as drinking too much or working too hard and staying away from home.
  - Take regular exercise.
  - Don't try to be "Superdad". Don't try to do everything at once. Make a list of things to do and set realistic goals.
- HVs should provide fathers with details of local support groups, such as Fathers' groups (often run in Children's Centres at weekends) or national help lines for advice and support. They therefore need to be aware of all local and national services/resources available for fathers. See the iHV parents tips for fathers for helpline websites and numbers bit.ly/1Pxf7Kw

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Understanding father's mental health & wellbeing during their transition to fatherhood

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Further resources can be found on the New Dads Study website www.newdadstudy.com

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APPENDIX – 55

Good Practice Points for Health Visitors

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Excellence in Practice

Understanding mothers' mental health & wellbeing during their transition to motherhood

Up to 1 in 5 women develop mental health problems during pregnancy or in the first year after childbirth (RCOG, 2017), and suicide remains a leading cause of death for women during this period (MBRRACE-UK, 2018).

Health Visitors (HVs) are ideally placed to support mothers during this transition. Through delivery of their universal service, they can provide anticipatory guidance, assess for risk and signs of mental health problems, manage mild to moderate perinatal mental illness and refer on to more specialist care. Perinatal mental illness (PMI) encompasses a range of mental health conditions that can affect women during the perinatal period. While depression and anxiety disorders are the most common perinatal mental illnesses, other conditions exist including eating disorders, drug and alcohol use disorders and severe mental illness such as psychosis, bipolar disorder and schizophrenia (NICE, 2014) (See box below).

Perinatal Mental Health Disorders

Depression: Persistent and pervasive low mood of varying severity and duration. It can affect women in the antenatal and postnatal period. Symptoms include on-going feelings of sadness, despair, difficulty dealing with daily life, constant tiredness, lack of energy, sleep disruption, self-blame, appetite disruption, impaired concentration, hopelessness, loss of motivation, self-neglect and suicidal ideation.

Anxiety Disorders: Anxiety disorders, including panic disorder, generalised anxiety disorder (GAD), obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD) can occur on their own or can co-exist with depression. Anxiety may include excessive worries about a number of life domains along with various physical symptoms. The main symptoms of general anxiety include feeling edgy/ restless/jumpy, apprehensive, nervous, experiencing fatigue, sleep disturbances, difficulty concentrating/focusing on things and stomach problems (nausea, diarrhoea).

- **Obsessive Compulsive Disorder (OCD)** is a mental health condition in which a person has obsessive thoughts and compulsive behaviours. Women are at higher risk of OCD during the perinatal period and symptoms are more prevalent after delivery. Obsessions are unwanted unpleasant ideas and thoughts that are persistent and repetitive in nature. They are often related to the baby and can cause deep feelings of anxiety, disgust and unease. Compulsions may include repetitive behaviour that temporarily relieves the unpleasant feelings brought on by the obsessive thought (e.g. those related to cleaning, washing and checking).
- **Post-Traumatic Stress Disorder (PTSD)** can occur for the first time, reoccur or worsen during the perinatal period (Howard et al, 2014b). Some women (and their partners) will experience PTSD as a direct result of a difficult labour or traumatic delivery. It is therefore important to give the woman suspected of depression the opportunity to recount her birthing experience to rule out this condition when screening for depression. Symptoms include anxiety, panic attacks, flashbacks, depressive symptoms and fear of sexual intimacy.

Eating disorders: Eating disorders are a persistent disturbance of eating that significantly impairs health or psychosocial functioning. Classified by DSM-5 as four broad categories: 1. Anorexia Nervosa 2.Bulimia Nervosa 3. Binge Eating Disorder and 4. Other Specified Feeding or Eating Disorders (OSFED). Symptoms may include menstrual dysfunction, fertility problems, intense fear of weight gain, severe emotional distress (Bye et al, 2018). Women with a history of an eating disorder may be at increased risk of perinatal depression (Bulik et al, 2009).

Postnatal Psychosis (Puerperal Psychosis): for further information, see related GPP for postnatal psychosis bit.ly/2KOVNxZ. This is a severe mental illness, with acute onset of symptoms, characterised by psychotic depression, mania or atypical psychosis. Symptoms include rapidly changing mood, bizarre behaviour, lack of inhibition, hallucinations (distortion of the 5 senses), delusions, confusion, agitation and lack of insight. Immediate assessment and treatment usually with antipsychotic medication in an inpatient setting by specialist mental health services are required for postnatal psychosis.

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The information in this GPP was updated on 13/08/2019 and will be reviewed again in 08/2021 and when new evidence becomes available.

Understanding mothers' mental health & wellbeing during their transition to motherhood

- Mood changes, irritability and episodes of tearfulness are common after giving birth. These symptoms, often known as the "baby blues", affect 30 - 80% of new mothers and lasts 5 to 10 days.
- If these symptoms of low mood are more persistent, for a period of two weeks or more, then it is possible it could be depression. Depression during pregnancy can affect up to 20% of women (Lorenzo, 2011) and 10 to 22% in the postnatal period (Gjerdingen et al, 2009; Pearlstein et al, 2009; Goodman and Santangelo, 2011; Liberto, 2012).
- Anxiety disorders are common in the perinatal period and often co-exist with depression. There is a higher risk of OCD in pregnant and postnatal women than in non-pregnant women.
- Complications of pregnancy and birth can be traumatic and lead to PTSD or other mental health problems in women and men. However, support can buffer against these negative consequences (Ayers et al, 2016).
- Risk factors identified as being strongly associated with perinatal mental illness include:
  - a lack of close confiding relationships; poor marital relationships; domestic violence;
  - major life events/recent stresses;
  - low social support;
  - a previous psychiatric history;
  - drug and alcohol problems;
  - hardship; housing problems;
  - a history of abuse;
  - obstetric complications or a traumatic birth;
  - occupational status;
  - anxiety and depression in the antenatal period.
- Mental health difficulties in the perinatal period can have a significant effect on the development of the infant and child (Murray et al, 1996) and are associated with risks for a broad range of negative child outcomes, which can persist into late adolescence. However, it is important to remember that having a mental health problem/ illness in the perinatal period does not equate to poor child outcomes - it is a risk factor, not a determinate.
- Women with bipolar disorder are at increased risk of experiencing postnatal psychosis and, even if they are currently well, women with a history of bipolar disorder should be referred to a specialist mental health team so that they can benefit from a personalised care plan, to include advice about medication and reducing the risk of relapse.

  The risk also increases for women with a previous history of postnatal psychosis and women with a family history of postnatal psychosis.

  50% of women who experience postnatal psychosis have no history of mental health problems.
- Postnatal psychosis is a psychiatric emergency (Shakespeare, 2016).
- Women who have experienced childhood abuse or trauma are at greater risk of postnatal depression. Pregnancy, maternity care, birth and becoming a parent can be a trigger, particulary fopr women who have experienced childhood sexual abuse (Fisher et al, 2017).
- Individuals who have experienced adverse childhood events (ACEs) such as abuse, neglect, parental mental illness, substance misuse and conflict are more vulnerable to experiencing physical and mental health difficulties throughout the life course (Hughes et al, 2017).
- If a woman consults her GP or health visitor and says she thinks she has a perinatal mental health problem, she is almost certainly right. Do not dismiss her or normalise her symptoms.
- In the context of maternal mental illness, new and persistent expressions of incompetency as a mother are known risk factors for maternal suicide and should be taken seriously (Shakespeare, 2016).

How health visitors can promote mothers' mental health and wellbeing and provide support:

- In order to provide the right help, including timely referrals, during contacts health visitors should give mothers an opportunity to talk about any concerns they might have about becoming a mother or previous experiences, such as fears around childbirth, multiple pregnancy, or past experiences, such as loss of a child or traumatic childbirth (NICE QS 115, 2016). A comprehensive assessment should include identifying factors that are known to increase vulnerability to mental health difficulties, such as domestic violence and childhood trauma.
- Raise awareness of PMIs and offer mental health promotion resources to both mothers and fathers/ partners, so that they are empowered to access help early if they notice any of the signs and symptoms of mental health problems.
- Routine antenatal and postnatal appointments are good opportunities to discuss emotional wellbeing and identify potential or actual mental health problems. As part of a robust and comprehensive assessment (NICE CG 192, 2014), women should be asked about their emotional wellbeing at each routine contact (NICE QS 115, 2016). Health visitors should be trained in the use of recommended and validated assessment tools, and use them alongside their clinical skills to inform clinical judgment.

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- For the most common perinatal mental illnesses, anxiety and depression, NICE (2014) advocates the use of the Depression Identification Questions (previously referred to as the Whooley Questions) for depression, and the Generalised Anxiety Disorder 2-item (GAD-2) screening tool for generalized anxiety disorder. NICE is clear that all tools can have false positives and negatives and that it is the holistic clinical assessment and skill of the practitioner that is vital in reaching clinical judgment.
- The Edinburgh Postnatal Depression Scale (EPDS) is internationally used and is validated for use in the antenatal and postnatal period. It is a 10-item self-report questionnaire that was developed in primary care - it is acceptable to mothers and its use is endorsed by NICE (2014). It is also available in 58 different languages (available in Cox et al, 2014). Patient Health Questionnaire (PHQ-9) (Spitzer, 1999) is also used as an assessment tool for depression and anxiety in addition to the Generalised Anxiety Disorder-7 (GAD-7) (Spitzer 2006).
- Health visitors need to be aware of and understand the importance of equality, equity and diversity in their practice. Including understanding and responding inclusively and competently to parents from minority backgrounds, such as parents who are in same sex relationships and parents from minority ethnic groups. This will enable them to care safely, sensitively and effectively for all families. When discussing issues around perinatal mental health, it is important to use properly qualified interpreters for non-English speaking clients, rather than family members (Baldwin & Johnson, 2016).
- There are many interventions known to be effective in supporting mothers with their emotional wellbeing during the perinatal period and health visitors have a role at every level of need from prevention to treatment. The HV offer might include:
  - proactive health promotion to reduce risk factors such as breastfeeding support, advice on sleep issues etc.
  - active evidence-based interventions such as non-directive counselling (listening visits), cognitive or interpersonal therapy.
  - timely referral on to appropriate services such as peer support, social groups, GP, IAPT/Talking therapies and specialist perinatal mental health services.
  - continuity of care if a mother requires help from some of these other services.

  Health visitors should be familiar with their local perinatal mental health care pathway because, when women have the right help at the right time, recovery from PMH problems is eminently positive.
- It is important to instil a sense of hope, helping women and their families to understand that mental health difficulties are common in the perinatal period and treatment is effective.
- If the mother has a PMI, it is important to ensure that the father/partner has adequate support systems in place. When a mother experiences a PMI, there is increased risk of mental health problems in the father/ partner - for further information, see related GPP for fathers' mental health http://bit.ly/2Kw3Zmj.
- Women who are taking psychotropic medication should be signposted to their GP or mental health services to receive information on the benefits and potential teratogenic effects of treatment if they are pregnant or breastfeeding (NICE, 2014).
- Mothers could be given the following self-help measures/advice to improve their mental health and wellbeing during the perinatal period and reduce the risks of PMI (Baldwin and Kelly, 2014):
  - Get as much rest and relaxation as possible.
  - Take regular gentle exercise.
  - Don't go for long periods without food because low blood sugar levels can make you feel much worse.
  - Avoid drinking alcohol as it can make you feel worse and has risks for the developing foetus and babies/ infants.
  - Eat a healthy, balanced diet.
  - Don't try to do everything at once. Make a list of things to do and set realistic goals.
  - Talk about your worries with your partner, close family and friends.
  - Contact local support groups or national helplines for advice and support.
  - Don't try to be "Supermum". Avoid extra challenges either during pregnancy or in the first year after your baby is born. A new baby is enough of a challenge for most people.
- HVs should also provide mothers with details of local support groups, such as postnatal support groups (often run in Children's Centres), or national help lines and online/digital resources for advice and support. They therefore need to be aware of all local and national services/ resources available for mothers.
- When identifying risks, health visitors should offer early help and follow local safeguarding protocols.

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Understanding mothers' mental health & wellbeing during their transition to motherhood

Additional Resources:

Action on Postpartum Psychosis (APP): www.app-network.org/

ChannelMum: https://bit.ly/2KZLlgt

Maternal Mental Health Alliance: www.maternalmentalhealthalliance.org/

Mind: www.mind.org.uk/

NCT: www.nct.org.uk/

NHS: www.nhs.uk/

PANDAS pre and postnatal depression advice and support: www.pandasfoundation.org.uk/

RCGP Toolkit perinatal mental health: https://bit.ly/2zk8Qk5

The Perinatal Mental Health Care Pathways: https://www.england.nhs.uk/publication/the-perinatal-mental-health-care-pathways/

Tommy's - Pregnancy and Post-birth Wellbeing Plan: https://bit.ly/2WhSCSs

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APPENDIX – 56

iHV Parent Tips

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Excellence in Practice

Understanding your Emotional Health and Wellbeing following the Birth of your Baby (Mothers)

Mood changes, irritability and episodes of tearfulness are common after giving birth. These symptoms are often known as the "baby blues", which affects 50% of new mothers and usually lasts around 5 to 10 days.

If your symptoms of low mood continue beyond this, it is possible that you are suffering from postnatal depression. You may also feel very anxious after your baby is born.

- Postnatal depression affects around 10 to 22% of women after having a baby and can affect mothers from all cultural backgrounds.
- If you are suffering from postnatal depression, you may feel a constant feeling of sadness and low mood, loss of interest in the world around you and you may no longer enjoy the things that used to give you pleasure. It is also possible to experience feelings of agitation, guilt, self-blame and difficulties in relating to your baby.
  - It is important to remember that every woman's experience of postnatal depression will be different and not every mother suffering from postnatal depression will experience all the symptoms.

More information on Page 2

For additional fact sheets see www.ihv.org.uk

iHV Parent Tips

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Excellence in Practice

Understanding your Emotional Health and Wellbeing following the Birth of your Baby (Mothers)

- Postnatal depression can cause relationship difficulties between you and your partner, as well as difficulties relating to your baby's sleep patterns, feeding and development delays in the long term, if not treated.
- Postnatal depression can be lonely, distressing and frightening, but there are many treatments available. As long as it is recognised and treated, postnatal depression is a temporary condition that you can recover from.
- It is very important to seek help if you think you have postnatal depression. The condition is unlikely to get better by itself quickly and it could impact on the care of the baby.
- If you think you may have postnatal depression then contact your health visitor or GP. They will be able to carry out a full assessment by asking you a number of questions and may ask you to complete a questionnaire, such as the Edinburgh Postnatal Depression Scale (EPDS). This will enable them to offer you the best support.
- Help is available in a range of different forms including self-help advice, talking therapies, such as cognitive behavioural therapy (CBT), and antidepressant medication.
- There are also a number of things that you can do to improve your emotional wellbeing following birth and reduce the risks of postnatal depression, such as:
  - Get as much rest and relaxation as possible.
  - Take regular gentle exercise.
  - Don't go for long periods without food because low blood sugar levels can make you feel much worse.
  - Don't drink alcohol because it can make you feel worse.
  - Eat a healthy, balanced diet.
  - Don't try to do everything at once. Make a list of things to do and set realistic goals.
  - Talk about your worries with your partner, close family and friends.
  - Contact local support groups or national helplines for advice and support.
  - Don't try to be "Supermum". Avoid extra challenges either during pregnancy or in the first year after your baby is born. A new baby is enough of a challenge for most people.
- **Remember: don't despair. You're not to blame. Postnatal depression can affect anyone and it can be treated with the right support and help. The earlier you seek help, the better.**

More information:

Boots Family Trust Wellbeing Plan:
bit.ly/1oH1Oz0

NHS Choices:
bit.ly/1yCYxBA

Mind:
bit.ly/1wMEMrP

Mind telephone:
0300 123 3393

Netmums Postnatal depression Support group:
bit.ly/1s8AAvZ

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APPENDIX – 57

iHV Parent Tips

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Understanding your Emotional Health and Wellbeing following the Birth of your Baby (Fathers)

Men go through a multitude of complex changes during the transition to fatherhood, making the postnatal period a particularly vulnerable time in a man's life.

Fathers can experience depression in the postnatal period resulting from the different demands placed on them. This is often known as paternal postnatal depression.

- Postnatal depression can affect up to 1 in 10 fathers, and first-time fathers are more prone to depression in the postnatal period.
- Depression in one parent is more likely when the other is depressed.
- If you are suffering from postnatal depression then you may experience irritability, increased anxiety, anger and aggression, changes in appetite, and loss of interest in things and activities that were once pleasurable.

More information on Page 2

For additional fact sheets see www.ihv.org.uk

iHV Parent Tips

Institute of Health Visiting
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Understanding your Emotional Health and Wellbeing following the Birth of your Baby (Fathers)

- It is important to remember that every man's experience of postnatal depression will be different and not every father suffering from postnatal depression will experience all the symptoms.
- Postnatal depression can cause relationship difficulties between you and your partner, as well as difficulties relating to your baby's sleep patterns, feeding and development delays in the long term, if not treated.
- It could also lead to self-neglect and engagement in unhealthy behaviours such as excessive smoking, drinking, gambling, drug-use etc.
- As for mothers, postnatal depression can be lonely, distressing and frightening, but there are many treatments available. As long as it is recognised and treated, postnatal depression is a temporary condition that you can recover from.
- It is very important to seek help if you think you have postnatal depression. The condition is unlikely to get better by itself quickly and it could impact on the care of the baby.
- If you think you may have postnatal depression then contact your health visitor or GP, who will be able to offer you the right support and help. There is help available in different forms including self-help advice, talking therapies, such as cognitive behavioural therapy (CBT), and antidepressant medication.
- There are also a number of things that you can do to improve your emotional wellbeing following birth and reduce the risks of postnatal depression, such as:
  - Recognise that you may sometimes feel down or low about being a parent.
  - Allow time for yourself, away from work and family.
  - Make sure to talk to your partner, family and friends about how you are feeling.
  - Focus on the enjoyable aspects of parenting.
  - Try to maintain any important hobbies or social events.
  - It is important to avoid negative coping strategies, such as drinking too much or working too hard and staying away from home.
  - Take regular exercise.
  - Don't try to be "Superdad". Don't try to do everything at once. Make a list of things to do and set realistic goals.
  - Contact local support groups, such as Fathers' groups or national help lines for advice and support.
- **Remember: don't despair. You're not to blame. Postnatal depression can affect anyone and it can be treated with the right support and help. The earlier you seek help, the better.**

More information:

NHS Choices:
bit.ly/1yCYxBA

The Fatherhood Institute:
bit.ly/1oxtrsr

Fathers Reaching Out: A support group/network for men whose wives or partners are suffering from post natal depression:
bit.ly/2f4CgM2

Mind:
bit.ly/1wMEMrP

Mind telephone:
0300 123 3393

Dad Info:
www.dad.info

National Childbirth Trust:
bit.ly/1SUa45J

New Dads' Survival Guide:
bit.ly/2bykeiV

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APPENDIX – 58

Training and development activities undertaken during this PhD

Type	Title	Start Date	End Date	Length (Days)
Training Course	Literature Review Workshops for Health & Clinical	15/Oct/2015	15/Oct/2015	0.5
Training Course	Search Techniques for Systematic Reviews	20/Oct/2015	20/Oct/2015	0.5
Training Course	Presentation Skills (For Postgraduate Research Students & Research Staff)	30/Oct/2015	30/Oct/2015	0.5
Conference Presentation	What is NW Communities of Practice? & PND Wheel	30/Nov/2015	30/Nov/2015	0.5
Training Course	Writing A Literature Review for the Sciences (For Postgraduate Research Students)	02/Dec/2015	02/Dec/2015	0.5
Poster Presentation	The PND Wheel	17/Dec/2015	18/Dec/2015	2.0
Delivering talks / training	Delivered Perinatal Mental Health Training	08/Feb/2016	09/Feb/2016	1.5
Training Course	Advanced Qualitative Research Module	12/Jan/2016	23/Feb/2016	6.0
Conference Presentation	Transition to Parenthood - Where do fathers fit in	14/Mar/2016	14/Mar/2016	1.0
Training Course	Effective Speed Reading	04/May/2016	04/May/2016	0.5
Training Course	Promotional Guide Train the Trainer Programme	18/Feb/2016	09/May/2016	1.5
Training Course	Fundamentals of Good Writing	11/May/2016	11/May/2016	0.5

Training Course	Desktop EndNote for PC	20/May/2016	20/May/2016	0.5
Delivering talks / training	Delivered Perinatal Mental Health training	08/Jun/2016	09/Jun/2016	1.5
Delivering talks / training	Delivered training on Fathers' Mental Health	18/Jul/2016	18/Jul/2016	1.0
Other Talks / Presentations	Writing for publication webinar	23/Aug/2016	23/Aug/2016	0.3
Conference	Promotional Guides Conference	12/Sep/2016	12/Sep/2016	1.0
Training Course	Introduction to Good Clinical Practice eLearning	13/Sep/2016	13/Sep/2016	0.5
Training Course	Safeguarding Training (Level - 3)	25/Oct/2016	25/Oct/2016	1.0
Delivering talks / training	Delivered Training on ASQ-3 & ASQ:SE	02/Nov/2016	02/Nov/2016	1.0
Other Development Activity	Attended CPHVA Annual Conference	15/Nov/2016	16/Nov/2016	2.0
Delivering talks / training	Delivered training on Promotional Guides (A/N)	29/Nov/2016	29/Nov/2016	1.0
Conference Presentation	Leadership in Health Visiting	07/Dec/2016	07/Dec/2016	1.0
Training Course	JBI Comprehensive Systematic Review	05/Sep/2016	09/Dec/2016	5.0
Delivering talks / training	Delivered training on Promotional Guides (P/N)	12/Dec/2016	12/Dec/2016	1.0
Training Course	Preparing for the Upgrade from MPhil to PhD	01/Mar/2017	01/Mar/2017	0.5
Training Course	Elite interviewing	21/Mar/2017	21/Mar/2017	0.5

Other Development Activity	1:1 session with Royal Literary Fund Writing Fellow	23/Mar/2017	23/Mar/2017	0.5
Other Development Activity	Attended AIMH National Conference	29/Sep/2017	29/Sep/2017	1.0
Delivering talks / training	Delivered Promotional Guide Training	03/Oct/2017	17/Oct/2017	2.0
Delivering talks / training	Delivered training on 2 year reviews and ASQ	13/Nov/2017	13/Nov/2017	1.0
Other Development Activity	Attended IHV Leadership Conference	05/Dec/2017	05/Dec/2017	1.0
Other Talks / Presentations	Presented my research at IHV PIMH London Forum	06/Dec/2017	06/Dec/2017	0.5
Training Course	Delivered Perinatal Mental Health Training	02/Nov/2017	03/Jan/2018	2.0
Conference Presentation	IHV & NIHR Conference	19/Jan/2018	19/Jan/2018	1.0
Training Course	IHV Perinatal mental health champions training	19/Mar/2018	20/Mar/2018	2.0
Training Course	NatCen Analysis of qualitative data (Framework)	23/Apr/2018	24/Apr/2018	2.0
Training Course	Presenting Magically	01/Jun/2018	03/Jun/2018	3.0
Training Course	Three Step Rewind Technique Training	04/Jun/2018	05/Jun/2018	2.0
Training Course	Women's Mental Health Research Summer School	02/Jul/2018	04/Jul/2018	3.0
Training Course	MECC trainers programme	08/Jun/2018	06/Jul/2018	3.0
Training Course	NLP Practitioner & Coach Training	06/Oct/2018	12/Oct/2018	7.0

Other Talks / Presentations	IHV PMH Forum - Fathers' Mental Health	15/Oct/2018	15/Oct/2018	0.5
Other Development Activity	CPHVA Annual Conference	17/Oct/2018	18/Oct/2018	2.0
Poster presentation	First-time fathers' mental health & wellbeing	17/Oct/2018	18/Oct/2018	2.0
Training Course	Delivered MECC Training	02/Nov/2018	02/Nov/2018	0.5
Other Development Activity	MECSH-UK Community of Practice Conference	16/Jan/2019	16/Jan/2019	1.0
Delivering talks / training	Fathers: mental health and wellbeing at UCL	05/Feb/2019	05/Feb/2019	0.5
Training Course	Writing Up the Thesis in the Arts/Humanities & Social sciences	14/Feb/2019	14/Feb/2019	0.5
Other Talks / Presentations	IHV Regional Perinatal Mental Health Forum	27/Feb/2019	27/Feb/2019	0.5
Delivering talks / training	Fathers mental health and wellbeing - KCL	01/Mar/2019	01/Mar/2019	0.5
Training Course	Preparing for the Viva (For Postgraduate Research	05/Apr/2019	05/Mar/2019	0.5
Other Development Activity	Journal of Health Visiting Conference	21/Mar/2019	21/Mar/2019	1.0
Other Talks / Presentations	NIHR/ IHV Regional Research Champions Meetings	12/Apr/2019	12/Apr/2019	1.0
Delivering talks / training	Fathers' mental health and wellbeing- LSBU	10/May/2019	10/May/2019	0.5
Other Development Activity	Annual NIHR/ IHV Research Champion's Day	11/Jun/2019	11/Jun/2019	1.0

Conference Presentation	Talking Dads Conference	17/Jun/2019	17/Jun/2019	1.0
Training Course	Developing and Evaluating Complex Public Health Interventions	24/Jun/2019	28/Jun/2019	5.0
Training Course	Implementation Science Masterclass	16/Jul/2019	17/Jul/2019	2.0
Conference Presentation	NIHR CLAHRC SL Conference	19/Jul/2019	19/Jul/2019	1.0
Poster presentation	NIHR CLAHRC SL - NEST Poster	19/Jul/2019	19/Jul/2019	1.0
Conference Presentation	IHV PIHM Relationships Matter Conference	10/Sep/2019	10/Sep/2019	1.0
Other Development Activity	Attended QNI Conference	24/Sep/2019	24/Sep/2019	1.0
Poste presentation	CPHVA Conference - NEST qualitative study poster	16/Oct/2019	17/Oct/2019	2.0
Other Development Activity	Attended CPHVA annual conference	16/Oct/2019	17/Oct/2019	2.0
Other Development Activity	Attended symposium - postnatal care in UK	27/Nov/2019	27/Nov/2019	0.5

MEMBER FOCUS

An inspiring achievement

Becoming the first health visitor to be awarded a fellowship by the National Institute of Health Research is a remarkable achievement by any standard. Sharin Baldwin spoke to *Community Practitioner* about what receiving the honour means to her

HOW DOES IT FEEL TO BE THE FIRST HV TO RECEIVE SUCH A FELLOWSHIP?

I feel honoured to receive this fellowship. It is something that I had been working towards for the past few years and it meant so much to me to finally be awarded with it. It means that I can now finally pursue my research, which I am passionate about, while developing a clinical academic career.

WHAT WAS THE APPLICATION PROCESS LIKE FOR YOU?

The application process is long and a lot of preliminary work needs to be undertaken before applying. I first applied for the NIHR Clinical Doctoral Fellowship in 2013 when Professor Sarah Cowley at King's College London introduced me to the scheme. If it wasn't for her encouragement and support I wouldn't have considered it in the first place.

I received excellent support from King's, and very soon I had a team of potential supervisors who were happy to support me in working up my proposal and the application for NIHR. I was shortlisted and got to interview stage in 2013, but unfortunately I was not successful in getting the award. However, the feedback that I received from the panel was extremely valuable and it highlighted the areas that I needed to focus on.

I then went on to apply for the fellowship again in 2014, and similarly reached interview stage but no further. This time I was offered the opportunity to receive verbal feedback from one of the panel members, which was really helpful. At this point, I was unsure whether I was going to apply for the fellowship again. Instead I planned to pursue my PhD on a part-time basis.

As I had put in so much work into my previous applications and I received so much support and encouragement from my supervisors, colleagues at work and other professionals, I eventually decided to give it one more shot. I applied again the 2015 and fortunately this time the perseverance paid off.

WHAT WAS IT LIKE FOR YOU WHEN YOU FOUND OUT YOU HAD BEEN SELECTED?

When I first received the email informing me that I was successful, I couldn't believe it. I was absolutely over the moon and had to read the email several times to make sure I had read it correctly. It took a while for it to sink in and I had a permanent smile on my face for several days. I think if I was successful the first time, it wouldn't have meant as much to me as it did this time around.

WHAT IS THE AREA OF YOUR PHD?

My PhD is on fathers' mental health and wellbeing during their transition to fatherhood, as this is an area that is often neglected. Health visitors, as well as other professionals working with families generally tend to focus on the mother and the baby. Although many professionals try to engage with fathers, often this can be difficult.

There is limited research on fathers' needs during the perinatal period. My study will explore fathers' mental health and wellbeing needs during their transition to fatherhood. It has the potential to provide vital information to inform the development of effective and timely interventions and services to better support new fathers' mental health and wellbeing, and contribute to the current public health agenda in the UK to:

- Ensure the best start in life for every child
- Improve understanding of fathers' mental health and wellbeing
- Improve public health
- Drive quality improvement.

WHAT IS YOUR MESSAGE TO OTHER CPHVA MEMBERS WHO WOULD LIKE TO SEEK OUT FURTHER EDUCATION OR FUNDING?

I would encourage all health visitors and community nurses thinking of further academic development to consider applying to NIHR. Generally this group of professionals are under-represented in such grant applications. What's more is that the recent report *The Shape of Caring Review* (Willis, 2015), estimated that only 0.1 per cent of the nursing workforce is made up of professors of nursing, and therefore we need more nurses leading on research and evidence-based practice.

With my particular fellowship what is great is that I can continue with my clinical development within health visiting, as well acquire new academic and research skills. If you're thinking of a research career but want to continue being a clinician, then clinical fellowships such as mine may be the way forward. Anyone thinking of applying to NIHR should speak to academics in their field so that they can be supported in developing a robust proposal and application. Having the right support and collaborative links is absolutely crucial. It's a great learning process and if you don't succeed at first, don't give up!

WHAT IS YOUR PLAN FOR THE FUTURE?

Being awarded this NIHR fellowship is an important step in helping me become a clinical academic of the future. Following the completion of the clinical doctorate, I plan to apply for a clinical lectureship post to continue with my research and further my clinical development.

APPENDIX – 60

NIHR/ IHV Conference Presentation Feedback from the Institute of Health Visiting

Email Subject: Your presentation at the NIHR conference

From: Cheryll Adams (cheryll.adams@ihv.org.uk)
To: sharinu@yahoo.com
Date: Saturday, 20 January 2018, 18:35 GMT

Dear Sharin

I just wanted to congratulate you on a really superb presentation a the NIHR research conference yesterday. It was just perfect, content, presenting style and engagement with the audience, such an honest portrayal of your research journey which will have been hugely helpful to others in the audience. Loved your slides too and you kept perfectly to time!

To have Susan Hamer at the end suggest that we were hearing from an International researcher must have been hugely exciting for you. I of course have never doubted your potential, but its wonderful watching you develop as you have.

Health visiting has a bright future if we can attract more like you to the profession and to the Institute.

Very best wishes

Cheryll

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APPENDIX – 61

Teaching activities at HEIs relating to this PhD

5th February 2019

- I was invited to deliver a lecture to MSc Paediatrics and Child Health students on their Child Public Health module on the topic of fathers, at UCL by Helen Bedford (Professor of Children's Health). I was able to inform them about my research and share the findings to date. There was a very good discussion about the implications for practice. The feedback from this session was positive.

1st March 2019

- I was invited to deliver a teaching session to over 80 undergraduate midwifery students at King's College London. I was able to highlight the importance of working with fathers and share my research findings to date. The implications for practice raised a number of questions and generated good discussions. Many students had not considered fathers prior to this session. The session was very well received.

10th May 2019

- I was invited to speak to health visiting and school nursing students about NEST and how best to support fathers' mental health. This session was very interactive, and the audience reported to have a better understanding on fathers' needs during the perinatal period as a result of this session. They also discussed how they would change their practice going forward, to include fathers.